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: Fall 2020
Lecture: Section 025 - T/Th 5:30–6:45PM CST (Zoom 955 6470 8611)
Discussions: Section 026 – T 7:00 – 7:50 PM, (Zoom 938 7898 2233)
Section 027 – W 4:10 – 5:00 PM, (Zoom 971 1712 0866)
Section 028 – W 5:30-6:20 PM, (Zoom 984 9893 6085)
***you must attend your assigned discussion section*

Professor: **Dr. Caitlin G. Decker, PhD**
Office: FH 200A (Zoom 289 445 029)
Office Hours: Th 1-2 PM (Chem 101designated OH, Chem 361 may attend)
W 11-noon (Chem361 designated OH, Chem101 may attend)
Email: *cdecker@luc.edu*
*** No problem-solving questions via email – only in discussion section / office hours.*

Teacher's Assistant: **Adri Lugosan** (Graduate Student at Loyola)
Office Hours: T&Th 4-5PM (Zoom 941 2026 1202)
Email: alugosan@luc.edu

Supplemental Instructor: **Bridget Melody** (Senior Undergrad at Loyola)
SI Sessions: TBD
Email: *bmelody@luc.edu*

Course Description: Lecture and discussion. Basic chemical principles. Topics: atomic and molecular structures, states of matter, energetics and reaction stoichiometry. For non-chemistry majors and students in the B.A. Chemistry program.

Prerequisite: Math 117 w/ C- or better OR math proficiency exam (CHEM 111 co-req.)

Materials: **Textbook / Learning Platform**
Brown, LeMay, et. al. (2018) Pearson Modified Mastering Chemistry Access Card for Chemistry, The Central Science (plus eText) **14th Ed.**

Registration:
Course ID: decker77721
Follow registration / purchase instructions posted in Sakaii Resources
**can later purchase loose-leaf within Mastering etext for ~$44.99

Required Technology
Zoom (https://www.luc.edu/its/itrs/teachingwithtechnology/zoom/)
Modified Mastering Chemistry Platform (included with above purchase)
Non-graphing calculator (ie// TI-30XIIS) -$13 (amazon)

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.

Important Dates: Oct 25th – Midterm Grades / Academic Alerts (*prior* to this date!)
Oct 30th – drop deadline

Reading/ Homework:

Mastering Chemistry Assignments (10%)
It is expected that students will read the chapters prior to the first class in which the material is presented (this should take 2-3 hours per chapter – highlight, take notes!). Pre-lecture assignments, post-lecture assignments and others will be listed in the Mastering Chemistry platform. The "Calendar" function is a good place to look and see what is due and when. Additional practice is encouraged using the end-of-chapter problems (odd answers at the back of the textbook). Suggested problems may be highlighted for emphasis throughout lecture and discussion. Keep in mind that for a 3-unit (3-credit) course students should spend ~9-12 hours / week studying and attempting practice problems to keep-up with the pace of the course.
**assignment content and due dates / times in Mastering may be edited / altered, added/removed at the professor's discretion, as the semester dictates

Participation:

Discussion Session Participation (10%)
Students are expected to regularly attend discussion. Discussion sessions will include interactive activities, problem solving, hand-outs, practice quizzes and/or other activities. Much of this work will be done in small groups (Zoom break-out sessions) although some individual work may be assigned. Grading of these assignments/sessions will be for effort and participation rather than correctness. Participation will be monitored by the TA and/or professor, and attendance may be recorded in a variety of ways (upload a filled-out handout on Sakaii, answer a mini-quiz on Sakaii, Zoom attendance record, etc). The TA or professor will notify students each session as to how attendance should be submitted. Attending is not a guarantee of points- actively answering questions (but allowing other students to also speak!) and actively problem-solving on hand-outs etc is required. Students may earn up to 1% per session for up to 10 sessions (so 10% max possible participation points).

Exams:

Online Exams + Final (80%)
Exams will be taken online. Exams are not cumulative; however, the material builds on prior knowledge. The final exam IS cumulative. Exams may be entirely multiple choice or may have short answer / essay questions or matching in addition. Pdf upload may be required for long answer sections if included. Length: 40 minutes (60 min Final). Online exams may be administered via Sakaii under the "Tests and Quizzes" tab. The first 10 minutes on Zoom will be used for announcements and set-up prior to the official exam start time.

Exam Dates:
Exam 1 – Th Sept 24th
Exam 2 – Th Oct 15th
Exam 3 – Th Nov 12th
FINAL - Th, Dec 10th, 5:30 PM *online*
*Final Exam IS Cumulative

Exam Protocol:

1) Sign-in to zoom (via sakaii course site) cameras ON at class start (5:30 PM) on a phone or other *secondary device*. **Angle camera** towards self, desk, and computer or *primary device* screen (ie// from side or behind).
2) Download and launch Respondus LockDown Browser on primary device https://loyola.screenstepslive.com/s/17190/m/84387/c/329155
3) Sign-in to Sakaii on primary device. Tests located in "Tests and Quizzes" tab
4) Do NOT wear any headphones, although ear *plugs* are permitted

***SAC students will have double time from the exam start-time (ie// 5:40-7 PM)*

****Announcements on Sakaii override any described procedures here**

Grading Scale:

	93-100% = A	90-92% = A-
87-89% = B+	83-86% = B	80-82% = B-
77-79% = C+	73-76% = C	70-72% = C-
60-69% = D		
Below 60% = F		

***the professor reserves the right to implement a curve, as necessary*

Grade:

Grades will be determined using the *higher* of the two methods below:

1) Participation + Mastering Homework = 20%.
   Remaining 80%: All three midterms + final are averaged
2) Participation + Mastering Homework = 20%.
   Remaining 80%: Top 2 mid-terms weigh ¼ each, final weighs ½

   ***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 the grade.*

To calculate what you need on the Final:

Ex 1) Student X wants to calculate the grade needed on the final exam in order to gain an overall score of 70% or a C- in the class. Student X has received the following scores thus far:
Homework: 6%
Participation: 9%
Exam 1: 56%
Exam 2: 70%
Exam 3: 42%

Method 1:
(56+70+42+N)/4 *0.8+ 15 = 70
Subtract 15 from each side, then x4 and /0.8 on each side to give:
56+70+42+N=275
Subtract the 3 known scores to give
N=107%

Method 2:
(56+70+2N)/4*0.8+15=70
Subtract 15 from each side, then x4 and /0.8 on each side to give:
56+70+2N=275
Subtract the 2 known scores to give
2N= 149
Divide by 2 on each side
N=74.5%

Therefore, Student X needs to earn a score of 74.5% on the final exam in order to pass the class with an overall grade of 70% or C-

Additional Resources:

1) SI (Supplemental Instruction) Sessions
There are **online** Supplemental Instruction (SI) study sessions available for this course. SI sessions are led by an SI leader, who is a student that has recently excelled in the course. Session attendance is open to all, and while it is voluntary, it is extremely beneficial for those who attend weekly. Times and locations for the SI session can be found here: www.luc.edu/tutoring. Students who attend these interactive sessions find themselves working with peers as they compare notes, demonstrate and discuss pertinent problems and concepts, and share study and test-taking strategies. Research shows students whom regularly attend sessions have higher grades at the end-of-the-semester and more deeply understand course concepts than those who do not. Students are asked to arrive with their Loyola ID number, lecture notes, and textbook. The SI is your advocate, and all interactions with an SI are confidential. The SI may share general feedback to the professor but will never indicate the comments or performance of any specific student. Attendance in the SI sessions will not be shared with the professor and does not affect final grades.

2) Tutoring Center
The tutoring center offers drop-in Zoom tutoring sessions as well as individual appointments via TutorTrac. Success coaches are also available. https://www.luc.edu/tutoring/

Institutional Policies:

Loyola Official Academic Calendar: www.luc.edu/academics/schedules

Incomplete Grade:
If the Final Exam is missed for extenuating circumstances (incapacitating illness, immediate family member death, fire/flood or related emergency) students must fill-out an "Incomplete Grade Form". Be aware that the option to apply for an incomplete grade is at the discretion of the professor. Incomplete grade info: https://www.luc.edu/regrec/faculty.shtml

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 the Department of Chemistry & Biochemistry website: http://www.luc.edu/chemistry/forms/ and personally meet and obtain a signature from either 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!

Accommodation Requests:
Additional time on exams, a quiet space for exams, a note-taker, or permission to record lectures can be requested for qualifying students. It is the responsibility of the student to register with SAC and to provide documentation to the professor prior to the initiation of such accommodations.
Student Accessibility Center: https://www.luc.edu/sac/registerwithsac/

Academic Integrity:
All students in this course are expected to have read and to abide by the demanding standard of personal honesty, drafted by the College of Arts & Sciences, which can be viewed at: http://www.luc.edu/cas/advising/academicintegritystatement/
A basic mission of a university is to search for and to communicate the truth as it is honestly perceived. A genuine learning community cannot exist unless this demanding standard is a fundamental tenet of the intellectual life of the community. Students of Loyola University Chicago are expected to know, to respect, and to practice this standard of personal honesty. Academic dishonesty can take several forms, including, but not limited to cheating, plagiarism, copying another student's work, and submitting false documents.
Any instance of dishonesty (including those detailed on the website provided above or in this syllabus) will be reported to The Chair of The Department of Chemistry & Biochemistry who will decide what the next steps may be. **Lapses in academic integrity will result in a grade of 0 (zero) on the assignment or exam, which cannot be "dropped" per any other class policy. A second transgression will result in a grade of 0 (zero) in the course overall.**

Loyola University Absence Policy for Students in Co-Curricular Activities (including ROTC):
Students missing classes while representing Loyola University Chicago in an official capacity (e.g. intercollegiate athletics, debate team, model government organization) shall be allowed by the faculty member of record to make up any assignments and to receive notes or other written information distributed in the missed classes.
Students should discuss with faculty the potential consequences of missing lectures and the ways in which they can be remedied. Students must provide their instructors with proper documentation (develop standard form on web) describing the reason for and date of the absence.
This documentation must be signed by an appropriate faculty or staff member, and it must be provided as far in advance of the absence as possible. It is the responsibility of the student to make up any assignments. If the student misses an examination, the instructor is required to give the student the opportunity to take the examination at another time.
(https://www.luc.edu/athleteadvising/attendance.shtml)

Accommodations for Religious Reasons:
If you have observances of religious holidays that will cause you to miss class or otherwise effect your performance in the class you must alert the instructor ***within 10 calendar days of the first class meeting of the semester*** to request special accommodations, which will be handled on a case by case basis.

Recording of Zoom class meetings:
In this class software will be used to record live class discussions. As a student in this class, your participation in live class discussions will be recorded. These recordings will be made available only to students enrolled in the class, to assist those who cannot attend the live session or to serve as a resource for those who would like to review content that was presented. All recordings will become unavailable to students in the class when the course has concluded. *Students will be required to turn on their cameras at the start of class. Students who have a need to participate via audio only must reach out to me to request audio participation only without the video camera enabled.* The use of all video recordings will be in keeping with the University Privacy Statement shown below.

Privacy Statement:

Assuring privacy among faculty and students engaged in online and face-to-face instructional activities helps promote open and robust conversations and mitigates concerns that comments made within the context of the class will be shared beyond the classroom. As such, recordings of instructional activities occurring in online or face-to-face classes may be used solely for internal class purposes by the faculty member and students registered for the course, and only during the period in which the course is offered. Students will be informed of such recordings by a statement in the syllabus for the course in which they will be recorded. Instructors who wish to make subsequent use of recordings that include student activity may do so only with informed written consent of the students involved or if all student activity is removed from the recording. Recordings including student activity that have been initiated by the instructor may be retained by the instructor only for individual use. Students may not share, electronically (uploading to the web) or otherwise (email, text message, in-person, etc.), any material outside of this course including but not limited to: Zoom/Panopto recordings, PowerPoint or other presentations, tests, quizzes, screenshots, handouts, journal articles, or any created material from the course. Any breach to this policy can result in legal action.

Tentative Course Schedule/Outline:

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

Week	Monday	Tuesday	Wednesday	Thursday	Friday
1	*Aug 24th*	*Aug 25th*	*Aug 26th*	*Aug 27th*	*Aug 28th*
		Syllabus / Ch. 1		Ch. 1	
2	*Aug 31st*	*Sept 1st*	*Sept 2nd*	*Sept 3rd*	*Sept 4th*
		Ch. 2		Ch. 2	
3	*Sept 7th*	*Sept 8th*	*Sept 9th*	*Sept 10th*	*Sept 11th*
		Ch. 3		Ch. 3	
4	*Sept 14th*	*Sept 15th*	*Sept 16th*	*Sept 17th*	*Sept 18th*
		Ch. 4		Ch. 4	
5	*Sept 21st*	*Sept 22nd*	*Sept 23rd*	*Sept 24th*	*Sept 25th*
		Review / Catch-up		***EXAM 1***	
6	*Sept 28th*	*Sep 29th*	*Sep 30th*	*Oct 1st*	*Oct 2nd*
		Ch. 5		Ch. 5	
7	*Oct 5th*	*Oct 6th*	*Oct 7th*	*Oct 8th*	*Oct 9th*
		Ch. 6		Ch. 6	
8	*Oct 12th*	*Oct 13th*	*Oct 14th*	*Oct 15th*	*Oct 16th*
		Ch. 7		***EXAM 2***	
9	*Oct 19th*	*Oct 20th*	*Oct 21st*	*Oct 22nd*	*Oct 23rd*
		Ch. 8		Ch. 8	
10	*Oct 26th*	*Oct 27th*	*Oct 28th*	*Oct 29st*	*Oct 30th*
		Ch. 9		Ch. 9	
11	*Nov 2nd*	*Nov 3rd*	*Nov 4th*	*Nov 5th*	*Nov 6th*
		Ch. 10		Ch. 10	
12	*Nov 9th*	*Nov 10th*	*Nov 11th*	*Nov 12th*	*Nov 13th*
		Review / Catch-up		***EXAM 3***	
13	*Nov 16th*	*Nov 17th*	*Nov 18th*	*Nov 19th*	*Nov 20th*
		Ch 21		Ch 24	
14	*Nov 23rd*	*Nov 24th*	*Nov 25th*	*Nov 26th*	*Nov 27th*
	THANKSGIVING BREAK				
15	*Nov 30th*	*Dec 1st*	*Dec 2nd*	*Dec 3rd*	*Dec 4th*
		Ch 24		Review / Catch-up	
16	*Dec 7th*	*Dec 8th*	*Dec 9th*	*Dec 10th*	*Dec 11th*
	Final Exam Week			***FINAL EXAM 5:30 PM***	

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. Nuclear Chemistry (*Selected Topics, if time allows*)
Ch 24. Organic & Biological Chem. (*Selected Topics, as time allows)*