

**Teaching Team:**

Professor: Dr. Polina Pine, PhD ppine@luc.edu

Peer tutor: Lizzie Proctor eproctor1@luc.edu

Class meetings and classrooms as on LOCUS: MWF 9:20-10:10am; Discussions M: 12:35-1:25pm; 1:40-2:30pm; 2:45-3:35pm (all in DUMB 230)

Prerequisite:

Essential: very strong knowledge of organic chemistry, very strong fundamentals of General Chemistry.

Office Hours:

Due to very limited shared office space students might not be accommodated if showed up on an alternative dates/time; some of the Office Hours may be scheduled in alternative spaces; please follow the in-class announcements for changes of the location. Tu 11:30am-12:30pm FH200B; Thr 12:20pm-1:00 pm (FH-007); Friday 10:30am-12:00pm

Course overview

Prerequisite: CHEM 221 or 223. This is Survey of Biochemistry course that emphasizes important biochemical concepts on the structure and function of proteins, enzymes, carbohydrates, lipids, as well as the bioenergetic and regulatory principles behind the central pathways.

Outcome: Students will be able to demonstrate an understanding of structural-functional relationships in biological molecules and how carbohydrates, proteins and lipids are metabolized.

Topics discussed in classes include kinetics, mechanism of enzymatic reactions and the central metabolic pathways of carbohydrates. Students who successfully complete this course will be able to do the following, at an acceptable level (including but not limited to): Identify and describe biomolecules including carbohydrates, amino acids/proteins and lipids. Choose appropriate buffer system; calculate the ratios of weak acid to conjugate base; determine the pKa from the associated titration curve; Show the major form of an amino acid/polypeptide including the zwitterion, at different pH values; track the fate of an oxygen molecule from inhalation in the lungs, track the fate of a carbon dioxide molecule produced from the TCA cycle, identify the kinetics of an enzymatic process; identify the substrates, enzymes and products in both catabolic and anabolic metabolism; track the fate of pyruvate and acetyl-CoA through the TCA cycle; track the fate and path of high-energy electrons through the electron transport complexes/respiratory chain, in conjunction with the Chemiosmotic principle of proton translocation utilized in oxidative phosphorylation to synthesize ATP.

The link to the evaluation of the course will be sent to students at the end of the term. Please find 2-3 minutes to fill this online survey. Please remember that as the evaluation manual states: “*..As student raters, you should also know that the results of your ratings for this class will be included as part of the information used to make decisions about promotion/tenure/salary increases for this instructor. Fairness to both the individual and the institution require accurate and honest answers.*”

Textbook and material:

All material including videos, tutorials, exam problems, etc. of this class is copyrighted and cannot be shared outside of this class.

The class sessions will be the most critical source of information for this course:

1. **Required:** Windows or Mac computer
You must contact the IT if you have any software or hardware difficulty. Computers and any other devices may **not** be used during classes unless is instructed otherwise.
Recording (audio or video) is strongly prohibited.
2. **Required:** Scientific Calculator. *NOT ALLOWED: calculators in a phone, tablet, computer, or in any other device.*
3. **Required:** any scanning app (free good Apps: Built-in Notes App in iPhones, free apps: CamScanner, Genius Scanner etc.).
4. **Required format of all handwritten submissions is PDF! Other files/formats will not be accepted.**
5. **Required:** Stable internet
6. **Required:** Sakai, and Panopto access **associated with your** Loyola UVID only (access given automatically if enrolled to a course, access using other person's UVID is not allowed). **It is student's responsibility to check all announcements on Sakai/email and follow them.** Any access to Sakai and Panopto must be for the student LUC account.
7. **Required:** Access to printer. Some assignments may require submission of a handwritten portion on a special form. Students must print this form and follow the instructions sent through the announcement or given in the assignment. Submissions in any other format may not be accepted.
8. **Required:** Buttell et.al [Biochemistry Workbook + Student Success Guide](#) ISBN 979-8326606907 (cheaper option- workbook only is a secondary option: [Biochemistry Workbook](#), Buttell et al ISBN 979-8335749428)
9. **Required (ANY Biochemistry textbook)/ Recommended:** WileyPlus account for the textbook *Biochemistry: An Integrative Approach with expanded topics, 1st Edition, John Tansey* (electronic version of this textbook is free with the paid WileyPlus access code). The registration flyer with the access code will be posted under Resources on Sakai.
10. Any two colors pens.

Focus on the material that is directly covered in a course structure, lecture, WileyPlus, and the workbook supplement with reading any or recommended textbooks. *See Tentative Lecture Schedule that will be posted on Sakai during the first week of classes. Students are expected to read related material from any textbook before and after each lecture.* The material covered in this class is mentioned in several textbooks. The additional reference texts are listed below. The recommended texts are given in the order of the priority.

Not required but highly recommended Reference textbooks:

- a) *Biochemistry: An Integrative Approach with expanded topics, 1st Edition, John Tansey*
- b) Dean R. Appling, Spencer J. Anthony-Cahill, Christopher K. Mathews, *Biochemistry: Concepts and Connections; Pearson (2nd or 1st edition)*
- c) *Biochemistry, Campbell/ Farrell/ McDougal, 9th ed. (or earlier ed.), Brooks-Cole, Cengage Learning, 2018*
- d) Pratt, Cornely, *Essential Biochemistry, Wiley ISBN: 978-1-119-31933-7 (or any earlier edition)*

Course Topics **Our actual pace and the topics may vary from the schedule:**

Please see Sakai and Panopto Modules' videos for the exact flow of the topics:

1. Chemical Foundations of Biochemistry
2. Amino Acids/Proteins
3. Protein Purification and Sequencing

4. Enzymes: kinetics of biochemical reactions
5. Enzymes: Allostericity, Additional regulation
6. Lipids: structure, properties, and function (including selected topics such as membranes, signaling)
7. Energy metabolism (Biochemical Thermodynamics)
8. Sugars: structures and functions
9. Glycolysis/ Gluconeogenesis (including regulation)
10. Pyruvate Dehydrogenase Complex (including regulation)
11. Citric Acid Cycle (including regulation)
12. Electron Transport Chain, Oxidative Phosphorylation
13. Shuttle Mechanisms and Anaplerotic Reactions
14. Lipid Metabolism (what time allows)
15. Nitrogen Metabolism (what time allows)
16. Glycogen metabolism and integration of metabolism

Example of reference chapters from an optional not required textbook the Biochemistry, Campbell/Farrell/McDougal, 9th ed: 2,3,4,5,6,7,8,15, 16,17,19,20,18,21,23, 24 (embedded in other chapters/topics).

Interaction with the professor and the classmates:

- Only positive, respectful behavior is tolerated in this class. Please see **Harassment (Bias)** section at the end of the document. If any not respectful behavior of any student towards other students or instructors is observed, it will be reported. Please keep all interaction (online and offline) respectful and professional.
- **Any specific questions regarding problem solving, lecture clarifications may not be answered over email. Please utilize peer forum (discussion) on Sakai and our office hours.**
- Students are expected to interact, ask each other, and answer questions in the Forum (Discussion) on Sakai. This activity is recorded, graded, and is included in the final grade (please see the Grading Scale for details).
- **To contact Dr. Pine during the semester by email put CHEM361-MWF in the Subject field.** If email is sent without this specific subject, it may be sent to a SPAM folder and/or overlooked. If your email has not been answered over email within 48 hours during the business days or in class do the following:
 1. Ask it after class meeting.
 2. Check if you sent it with **CHEM361-MWF** in the subject field (if not, please resend following the proper format).

All emails will be answered within at least 48 hours window during business days. **No email interaction aside the business hours. Emails are not answered during weekends, breaks, and holidays.**

Structure of the class:

- It will remain a principle of this class-section that, out of respect for the health of housemates and others in regular contact with members of our community, we will be respectful of masks in the classroom.
- **Absolutely no to any type of electronic communication and using phones or/and smart watches, computers, tablets, earphones, air pads during the class time.** If you have an emergency communication, please let Dr. Pine know right before the class starts. If you need to send a text, email

or any other type of electronic communication please quietly leave the room and come back when finished.

- If you decide to come to class, you must come on time and not leave the class except for health and physiological related emergency reasons that need to be communicated by you later.
- Absolutely no destruction to the classmates and the lecturer are tolerated, it will be considered as policy violations and will be reported.
- Any group activities not related to the class during or right before or after class will be considered as policy violations and will be reported.
- **Using of tablets and computers will be allowed only for planned in class activities and will be announced by the instructor.**
- **Absolutely NO RECORDING on any device and any app. For example: you are not allowed to use recording functionality in Notability app. Exceptions are given in the student accommodation section.**
- The course content is broken into modules by topics/chapters and into weeks by pace: Week 1 through Week 16.
- WileyPlus practice questions will be posted on WileyPlus for additional practice and will not be a part of your grade. A good indication of the progress is if a student can complete the posted practice question blocks without any notes, and any material within a short time period (usually 50 minutes but it may vary based on the length and complexity of the problems).
- Any additional material if assigned will be posted on Sakai. If posted on Sakai students must follow all the directions given in the handout.
- **Discussion-meetings** will be in the form of individual and group work based on the activities from the *Biochemistry Workbook + Student Success Guide by Buttell et al.* **Students MUST bring the workbook to every Discussion, come prepared to participate in a verbal and non-verbal form.** Usually, no material will be allowed to be used during the Discussion-meeting activities, hence all students must review the lecture material, before coming to the class. Almost every discussion-meeting will be concluded with the graded submission.
- **Discussion-meetings' activities** must be handwritten by the submitting student in the physical workbook and if collected will be collected during the scheduled Discussions ONLY without announcement in advance. If collected in the electronic pdf format it will be collected through the Gradescope only, **it will be in electronic pdf submission only**, any other submission may not be accepted. The valid submission is in the announced format only, without notifications. If collected a physical copy, the electronic copies will not be accepted. If collected will be graded as zero or one. These points will contribute to participation category of the total grade. The points are granted ONLY if the submitting student attends the scheduled meeting and follows all the directions and formats. Failure to submit due to a technology difficulty will not be a reason for resubmission or any points. If a student missed the Discussion/submission due to sickness, work, family reasons, or other catastrophic event **up to two** missed submissions will be a drop at the end of the semester (no late submissions are allowed).
- **Sakai Forum (Discussion)** is designed to connect students together and accelerate peer-to-peer support. This is an additional source for questions and answers in the peer-to-peer format, which is a part of your overall grade. The posts are required every week and will be **due every Friday 11:59pm**, no penalty 48 hours emergency or special case personal extension may be given, not need to contact the instructor. Additional extension may not be given.

- **Office hours**, group sessions and meetings will follow the predefined schedule. For example, if the schedule indicates Module 2 the sessions will be focused to the material of this module and not previous or next module. Students must collect questions related to the material and ask them during office hours.
- The attendance is not taken for grade but remember, that main source of information in this class are lectures and discussions and assigned videos (only if assigned). If you are experiencing any symptoms of any illness, please follow University and CDC guidance and respectful common sense.
- Missing classes is not recommended but If you miss a class for any reason, make sure to contact your classmates on Sakai/Forum(Discussion) to get an update.
- Please remember, mutual support and understanding (students-student, professor-students and finally student-professor) is a KEY to success in a class and life in general. Please be kind, understanding and supportive. I cannot obligate but I encourage everyone to share their lecture notes if a person who misses the class is asking for help.
- Use specific, separate notebook or notetaking app to keep track of the questions that rise.
- Make-up, early, late assignments are not available for this course. However, if ONE exam is missed due to a serious illness different grading scale may be implemented if documented evidence is presented within one week of the missed exam (see option 2 form the Grading section for details). Other missed assignments will **not** give an opportunity for re-take or make up.
- **For success in this course, it is important to stay in a planned pace, review your notes, watch videos, read the textbook, work on homework problems if assigned and work on memorization every day.** DO NOT FALL BEHIND. There will be a big portion of memorization material in this course.

EXAMS:

- All Exams are IN PERSON IN CLASS exams (online exams are not given and not an option) closed book, closed notes, closed Internet, closed WileyPlus. Absolutely no help on the exams may be accepted or given. Absolutely no material may be used except for calculator, pencil, eraser. Students will be expected to follow the policies of Academic Integrity and may be required to sign Honor Pledge of academic honesty. If any violation or any unauthorized internet activity is detected it will be reported and automatic F-grade will be assigned for the class. See Academic Dishonesty Statement given below.
- Absolutely NO alternative times, days, formats, places of the exam for any reason. However, if a student misses one exam due to quarantine, COVID-19, illness, work shift, flat tire, mental health problem, unexpected catastrophic event, weather condition or any other unexpected or scheduled serious circumstances, this missed exam may be dropped and the weight of this exam will be distributed following the option 2 (see grading section below).
- Students with the time extension (SAC students) may take their exam ONLY at the SAC center and ONLY during the time that overlaps with the time and the date of the scheduled exam in the following way: start your exam half an hour before the time of your CHEM361 lecture) during the scheduled day for the test).
- There are three 45 minutes-unit exams + 5-minute distribution/collection (this time includes the exam material distribution; all students will start the exam together) and one final exam. If a student comes late to the exam for any reason this student will have to finish and submit the exam with the rest of the class (additional time to supplement for the late start may not be provided).
- The exams are timed and proctored. Please prepare to take the exam ahead of time. You may not leave a room during the exam before finished. If you need to leave the room, you must submit the exam for the final grading.
- Please prepare and use during the Exams (calculator if allowed will be announced before the exam), your ID, pencils, and erasers. The format of each exam will be announced during the lecture before the exam in class in person meeting only. No personal email about the format of the exam may be

answered, please address them during in person meetings and discuss them before the exam on Sakai/Forum.

- The Exams are scheduled on the following weeks (MAKE SURE TO ALLOCATE THIS TIME SLOTS FOR YOUR EXAM, OPTIONAL PERSONAL TIMES/DATES ARE NOT POSSIBLE):

- I. Unit Exam 1 M-September 23rd (during the lecture time)
- II. Unit Exam 2 W- October 16th (during the lecture time)
- III. Unit Exam 3 W-November 13th (during the lecture time)
- IV. Final Exam-See official Loyola calendar (Saturday December 14th 1-3pm)
<http://luc.edu/academics/schedules/index.shtml>

- **Exam Days:** Please prepare and use during the Exams your ID, pencils, and erasers only, all bags, jackets, smartphones, smartwatches, earphones and other personal belongings must be placed under the board in front of the class at least 5 minutes before the scheduled exam. The format of each exam will be announced during the lecture before the exam in class in-person meeting only. No personal email about the format of the exam may be answered, please address them during in person meetings and discuss them before the exam on Sakai/Forum. Students must read carefully (it is student's responsibility to read and know) all directions related to the exam procedure given in the Syllabus or sent before the exam. Not following the direction, not reading the directions, missing the direction will not be tolerated.
- **After the Exam:** After the exam is submitted, please do not return to your seat, exit quietly the classroom. No communication about the exam in any part of the Sakai/Forum (Discussion). Issues with graded exams must be submitted during one calendar day of being returned or as instructed by Dr. Pine, otherwise scores will be considered final.
- **Students with the time extension (SAC students)** may take their exam ONLY at the SAC center and ONLY during the time that overlaps with the time and the date of the scheduled exam in the following way: start your exam half an hour before the time of your CHEM361 lecture) during the scheduled day for the test).
- Students must read carefully (it is student's responsibility to read and know) all directions related to the exam procedure given in the Syllabus or sent before the exam. Not following the direction, not reading the directions, missing the direction will not be tolerated.
- There are NO EXTRA ASSIGNMENTS NO MAKE-UP, NO EARLY OR LATE EXAMS OR QUIZZES. Under no circumstances may an exam/quiz/assignment be taken at a time and date other than that assigned.
- Issues with graded exams must be submitted within one calendar day of being returned, otherwise scores will be considered final.
- **All exams must be taken during the scheduled time only! And only in person or as the rest of the class is taking the exam.**
- **Final exam** is MANDATORY. The final exam must be taken ONLY on the date scheduled or a grade of F will automatically result. Final exam is comprehensive cumulative and will integrate all the knowledge gain during the semester. The final details about the final exam will be given at the end of the semester.
- Last day to Withdraw with W grade is November 1st
- **A link to the official Loyola calendar can be found here:**
<http://luc.edu/academics/schedules/index.shtml>

It is student's responsibility to follow the announcements, and all policies or changes of the class

Instructor Privileges

Instructor reserves the right to make changes and adjustments to this syllabus as necessary, including, but not limited to the grading policy and course schedule.

Grading policy:

Under no circumstances may any exam be taken at a time or date or place other than that assigned. However, the flexibility to encounter for needed quarantine, COVID-19 positive test, any unexpected illnesses, global and personal unforeseen circumstances, catastrophic events is embedded in the grading scale Option 2 (please see details below). Missed exam cannot be taken in a different time or different day but it can be your dropped exam. *Student must provide documented evidence for the missed exam.* The final grade for eligible students will be automatically determined using option that gives a higher score.

The midterm and final letter grades will be given based on the points scored in the course only, please do not contact for personal or group extra-credit favors or special deadlines. Final grade will be determined using the table below. **IMPORTANT: NO MAKE UP OR LATE/EARLY EXAMS, NO MAKE UP OR LATE/EARLY SUBMISSIONS of any type.**

Option 1	
Sakai Forum/Discussion Workbook activities	20%
Unit Exam 1	20%
Unit Exam 2	20%
Unit Exam 3	20%
Final Exam	20%
Total	100%

For students who missed one unit exam due to illness or catastrophic life event (Missed exams cannot be taken in a different time or different day. Final exam must be taken):

Option 2	
Sakai Forum/Discussion Workbook activities	20%
Best Unit Exam	25%
Second Best Unit Exam	25%
Final Exam	30%
Total	100%

One missed in-class exam due to absence for any reason is already accommodated in the course grading system. Given that only the best two in-class exams are included in this calculation, a missed exam would be the one not included in this calculation, as it would be the lowest score (0%) of the three exams.

If a student follows ALL the due dates, policies, and directions of the class, took the exams during the scheduled times, have never requested any special accommodation and/or late submissions for any reason, actively participated in the Forum (Discussion) and class activities including Lectures and Discussion-meetings this student may be eligible to drop one lowest (missed) exam and the final grade

will be calculated using Option 2. Please note: students are not eligible for Option2 automatically. Not eligible students will be notified at the end of the term. The final grade for eligible students will be automatically determined using option that gives a higher score.

Forum (Sakai Discussion) Grading:

Forum is graded weekly. There are two options only for Forum grading 0 and 1. A student is required to post at *least one time* a week in the forum, each post will grant 1 point per post (*posting more is encouraged but will not grant additional points*). Additional Forum activities if assigned will be announced through Sakai/Announcements or Sakai/Discussions and will grant additional participation points. At the end of the semester all these points are converted to the percentages and weighted into overall score. Please follow Forum etiquette policies on Sakai under Syllabus.

Most Active Forum Participation: 10 most active Forum participants will be given 5% points added on top of the Forum/Participation percentage before weighting into the overall score of the class: Example: A student scored 97% on the Sakai Forum+ Other participation points. This student was one of the most active Forum participants (posting/answering). Sakai Forum + Other participation SCORE of this student will be $97\%+5\%=102\%$ It will be incorporated in the final grade as $102*0.15+\text{rest of the components}$.

All graded assignments including the exams: Only mistakes such as tallying up points by the system are eligible for regrading, students' typos, overlooking the directions, not following the directions, and other mistakes and other circumstances are not eligible for any type of regrading. For this reason, please read carefully all the directions and ask the professor if anything remains unclear. **No personal, alternative, students proposed grading scales and requests or requests for partial credit or any type of extra credit may be accommodated.** Final letter grades are given based on the points earned by a student only. Grades may not be changed arbitrary.

Approximate grading scale (letter grade is related to percentage scored in the class):

A	A-	B+	B	B-	C+	C	C-	D+	D	F
100-95	94-90	89-85	84-80	79-75	74-70	69-65	64-60	59-58	57-55	less than 55

Students seeking Special Accommodations (SAC)

If you have any special needs, please send me an official letter from the Student Accessibility Center SAC in the first week of classes. The university provides services for students with disabilities. Any student who would like to use any of these university services should contact the Student Accessibility Center (SAC), Sullivan Center, (773) 508-3700, contact SAC@luc.edu. Further information is available at <http://www.luc.edu/sac/>.

Exams times for students with documented time extension (SAC):

All students with the documented time extension will start the exams on time of the scheduled exam for the whole class. Please follow details if sent in a general announcement before each exam. Students with the time extension (SAC students) may take their exam ONLY at the SAC center and ONLY during the time that overlaps with the time and date of the scheduled exam in the following way: start your exam half an hour before the time of your CHEM361 lecture) during the scheduled day for the test).

Please note that materials from this course (INCLUDING PROBLEM SETS, EXAMS, PICTURES, VIDEOS and DISCUSSION PROBLEMS/QUESTION) cannot be shared outside the course without the instructor's written permission. No photos/screen shots, video sharing of any part of the exam. All material in this class is copyrighted.

Academic Integrity

Trust and integrity are important qualities in students. All submitted work must represent your own work and your own work only. Academic dishonesty of any kind, such as plagiarism and cheat sheets on exams, will not be tolerated. Any student caught cheating on an assignment in any way will receive a "zero" for that assignment and be reported to Chairperson of the Chemistry Department and the Dean School of Art and Science. For further information regarding the Academic Integrity policy and disciplinary procedures, refer to the Undergraduate Studies Catalog: http://www.luc.edu/academics/catalog/undergrad/reg_academicintegrity.shtml.

Academic Dishonesty includes such infractions as:

- Obtaining a copy of tests or scoring devices
- Sharing or attaining exams/assignments/problems/solutions on Chegg or similar platforms.
- Using another student's answers during an examination
- Providing another student questions or answers to or copies of examination questions
- Having another person impersonate the student to assist the student academically.
- Impersonating another student to assist the student academically.
- Representing as one's own work the product of someone else's creativity.
- Using, or having available for use, notes or other unpermitted materials during "closed book" examinations.
- Duplicating any portion of another student's homework, paper, project, laboratory report, take-home examination, electronic file, or application for submission as accepting a copy of tests or scoring devices
- Having someone other than the student prepares any portion of the student's homework, paper, project, laboratory report, take-home examination, electronic file, or application, other than for a teacher-approved collaborative effort.
- Permitting another student to copy any portion of another student's homework, paper, project, laboratory report, take-home examination, electronic file, or application other than for a teacher-approved collaborative effort.
- Using any portion of copyrighted or published material, including but not limited to electronic or print media, without crediting the source.
- Any other action intended to obtain credit for work that is not one's own.
- Regarding the use of Artificial Intelligence: our Provost has expressed to "Let us all make sure we are learning and sharing best practices and not allowing AI to do the learning for us." In this course, any work you submit for credit must represent your own ideas and understanding of the assigned material. If you are uncertain about any case where your use of AI may be in conflict with University or course standards, please see me to discuss your concerns.

Recording of Zoom class meetings

In this class software may be used by an instructor only to record live class discussions (students and other individuals are prohibited to record, take photos or screenshots). As a student in this class, your participation

in live class discussions may 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.

Tutoring Center

The CTAE offers several different programs each semester, including class-specific tutor-led small groups, Academic Coaching groups dedicated to general academic support, and a Study Buddy Directory for students seeking out more independent collaboration with other students in the same class or subject area. For more information refer to http://www.luc.edu/tutoring/Small_Group_Info.shtml

Harassment (Bias Reporting)

It is unacceptable and a violation of university policy to harass, discriminate against or abuse any person because of his or her race, color, national origin, gender, sexual orientation, disability, religion, age or any other characteristic protected by applicable law. Such behavior threatens to destroy the environment of tolerance and mutual respect that must prevail for this university to fulfill its educational and health care mission. For this reason, every incident of harassment, discrimination or abuse undermines the aspirations and attacks the ideals of our community. The university qualifies these incidents as incidents of bias. To uphold our mission of being Chicago's Jesuit Catholic University-- a diverse community seeking God in all things and working to expand knowledge in the service of humanity through learning, justice and faith, any incident(s) of bias must be reported and appropriately addressed. Therefore, the Bias Response (BR) Team was created to assist members of the Loyola University Chicago community in bringing incidents of bias to the attention of the university. If you believe you are subject to such bias, you should notify the Bias Response Team at this link: <http://webapps.luc.edu/biasreporting>

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.

Loyola University Absence Policy for Students in Co-Curricular Activities:

Students missing classes while representing Loyola University Chicago in an official capacity (e.g. intercollegiate athletics, debate team, model government organization) 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 make up examination at another time that fits the class schedule and requirements (<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.

Pass/fail conversion deadlines and audit policy.

A student may request to convert a course into or out of the "Pass/No-Pass" or "Audit" status only within the first two weeks of the semester.

Returning to campus

Please be familiar with and adhere to all guidelines posted on the *On-Campus Guidelines in Classroom Scenarios of the Return to Campus Guidelines* site:

(<https://www.luc.edu/returntocampus/classroomscenarios/>)

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.

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>)

Health, Safety, and Well-Being On-Campus

Please be familiar with and adhere to all policies and protocols posted on the *Campus Info & Resources* site:

<https://www.luc.edu/healthsafetyandwellbeing/campusinforesources/>

Additional Information:

The Biochemistry class may include case studies that explore various medical conditions and related biochemical processes. These case studies and in-lecture examples are intended to enhance your understanding of the subject matter by applying theoretical knowledge to real-world scenarios. However, it is essential to recognize that these case studies may touch upon sensitive topics related to medical conditions and diseases and global issues related to biochemistry.

Please be aware of the following considerations when engaging with case studies and lectures in this course:

1. **Sensitive Content:** Some case studies may describe conditions that can be emotionally distressing or sensitive in nature. These topics could include chronic illnesses, terminal diseases, or other health-related issues. We approach these subjects with the utmost respect and empathy for individuals affected by them.
2. **Privacy and Confidentiality:** Case studies may incorporate scenarios based on real-life situations, but it is important to note that any names and identifying information used are fictitious and do not represent actual individuals.
3. **Academic and Professional Approach:** The primary goal of discussing these case studies is to foster a deeper understanding of the biochemical processes underlying various medical conditions. We encourage you to approach these discussions with academic and professional sensitivity, focusing on the scientific aspects rather than personal or emotional reactions.
4. **Respect for Diversity:** Biochemistry class case studies should be discussed in a manner that respects diversity and individual perspectives. Everyone may have a different level of familiarity or personal connection to the topics discussed, so it's important to that the students help to maintain a supportive and inclusive learning environment.
5. **Support Resources:** If you find the content of any case study particularly distressing or if you have concerns about your emotional well-being, please reach out to the instructor or appropriate support resources available at Loyola. We are here to help and provide guidance if needed.

By participating in this class and these case studies, you acknowledge your understanding of these considerations. We strive to create a supportive and informative learning experience while respecting the sensitivity of the subject matter. Your constructive and respectful engagement with these case studies is appreciated as we collectively aim to advance our knowledge of biochemistry and its applications in the context of real-world medical conditions.