## Biochemistry CHEM 370-001/470-001 Syllabus-Fall 2023

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

Class meetings (see LOCUS): 12:35-1:25 pm MWF-lectures; 10:25-11:15am F-Discussion 002; 11:30-

12:20pm F- Discussion 003

**Office Hours:** Due to the shared office space all Office Hours will be scheduled in alternative spaces, students must make an appointment through SAKAI only (Sign-up): M 10:30am-11:30am (FH-200); W-1:40pm-2:40pm (STEM center) by appointment on Sakai (subject to changes). First week will follow a different schedule due to nonavailability of the STEM center.

# Prerequisite:

Essential: <u>very strong</u> knowledge of CHEM 221 or 223 and CHEM 222 or 224, and <u>very strong</u> <u>fundamentals</u> of General Chemistry.

#### **Course overview**

This is the first part of a two-semester Biochemistry series that emphasizes important biochemical concepts on the structure and function of proteins, enzymes, carbohydrates, lipids and cell membranes as well as on the bioenergetic and regulatory principles behind the central and carbohydrate pathways.

Outcome: Students will be able to demonstrate an understanding of structural-functional relationships in biological molecules and how carbohydrates 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/lipid bilayers. 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. <u>Required:</u> Scientific Calculator. NOT ALLOWED: calculators in a phone, tablet, computer, or in any other device.
- 3. <u>Required:</u> 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. <u>Required</u>: Sakai, and Panopto access <u>associated with your</u> 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.
- 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. <u>Required:</u> WileyPlus account. The homework will be assigned on WileyPlus. The registration flyer with the access code will be posted under Resources on Sakai.
- 9. <u>Textbook:</u> Berg, Tymoczko, Gatto and Stryer, Biochemistry, 9th Ed.(please contact the bookstore if you wish to purchase this option).

Not all textbook sections will be fully covered or covered in the order the textbook dictates, so focus first on the material that is directly covered in a course structure, lecture, WileyPlus and assigned for homework. See Tentative Lecture Schedule that will be posted on Sakai during the first week of classes. Students are expected to read related material form <u>any</u> 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 recommended Reference textbooks:

a) Biochemistry: An Integrative Approach with expanded topics, 1st **Edition**, John Tansey (comes for free with purchase WileyPlus homework platform)

- b) Dean R. Appling, Spencer J. Anthony-Cahill, Christopher K. Mathews, *Biochemistry:* Concepts and Connections; Pearson (2<sup>nd</sup> or 1<sup>st</sup> 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 follow the Live Class Lectures 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. Channels and Pumps
- 14. Signal Transduction
- 15. Selected topics from Nucleotides
- 16. Selected topics from recombinant technologies (genomics).
- 17. Introduction to Bioinformatics

See the assigned reading on WileyPlus. Chapters from the textbook **Berg, Tymoczko, Gatto and Stryer**: 1-18

# 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 respectful and professional.
- Students are expected to interact, ask each other, and answer questions in the Discussions/Forum on Sakai. This activity is recorded, graded, and is included in the final grade (please see the Grading Scale for details).
- Any specific questions regarding problem solving, lecture clarifications <u>may not</u> be answered over email. Please utilize peer forum (discussion) on Sakai and our office hours.

- Main interaction in this class is in person interaction during the Lectures, Discussions, Office Hours and Sakai Forum. Most of the time I will be teaching you or other classes and will be away from my virtual desk, for this reason emails are NOT preferred and not the main source of interaction. Make sure to ask your questions or bring your concerns to in-person meetings. If you still prefer to contact using email, please follow next two bullet points:
- To contact Dr. Pine during the fall semester starting August 30<sup>th</sup> by email put **CHEM370** 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 during the business days over 48 hours or during in person meeting session, do the following:
  - 1. Check if you sent it with CHEM370 in the subject field (if not, please resend following the proper format).
  - 2. If the format is correct and it was not answered during the in-person meeting or office hours, please resend it.
- I will be happy to answer any questions or emails during official business hours.
- All emails will be answered within minimum 48 hours window during business days. No email interaction aside the business hours. Emails are not answered during weekends 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. Mask covering over your nose and mouth are respected and enthusiastically accepted if you feel sick or have any flu or allergy symptoms especially during office hours, or with any in person interaction with the instructor (such as questions before/after the lectures/discussions, questions during the exams). Will be modified if needed.
- Absolutely no to any type of electronic communication and using phones or/and smart watches, computers, tablets during the class time. If you have an emergency communication, please let Dr. Pine know right before the class starts.
- 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 <u>not</u> 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.
- Homework will be in the form of WileyPlus every week and will be due every Friday 11:59pm, no penalty 48 hours emergency or special case personal extension may be given, there may be changes in the due dates the weeks of the exams (make sure to follow announcements in class). Additional low penalty flexibility is embedded in each homework please follow the policies on WileyPlus. Students must start working on these assignments as soon as it is released to prevent missing the due dates. The flexibility that considers personal and global

unforeseen circumstances is already embedded in the grading scale. Email requesting additional extensions (for any reason) may not be accommodated. It is students' responsibility to check on WileyPlus daily. Students must supplement this mandatory homework with the end of chapter problems (solution for these problems is given in the back of the textbook). A good indication of the progress is if a student can complete the homework without any notes, and any material within a short time period (usually 50 minutes but it may very 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. Students MUST 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** if collected will be collected during the scheduled Discussions ONLY without announcement in advance, through the Gradescope only, **in a group electronic submission only**, in the announced format only, without notifications. 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 in person 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 **one** missed submission 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.
- 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.
- 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 last but not least 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 will 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 W-Sept 27<sup>th</sup> (during the lecture time)
  - II. Unit Exam 2 W- Oct 18<sup>th</sup> (during the lecture time)
  - III. Unit Exam 3 W-Nov 15<sup>th</sup> (during the lecture time)
  - IV. Final Exam-See official Loyola calendar: Saturday December 15th 9am-11am <a href="http://luc.edu/academics/schedules/index.shtml">http://luc.edu/academics/schedules/index.shtml</a>
- Exam Days: Please prepare and use during the Exams your ID, pencils, and erasers only, all bags, jackets, smartphones, smartwatches 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.
- <u>Final exam</u> 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.

 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 and date other than that assigned.

However, to encounter for unexpected illnesses the alternative grading scale will be used (please see details below).

The midterm and the final letter grades will be given based on the points scored in the course only, please do not contact for personal extra-credit favors. Final grade will be determined using the table below. IMPORTANT: NO MAKE UP OR LATE EXAMS, NO MAKE UP OR LATE SUBMISSIONS, No ALTERNATIVE ASSESMENT of any type. No early or late exams, no make-ups. However, to accommodate students' personal circumstances (COVID or other sickness, quarantine, job schedules, family circumstances, unstable internet connection, technology issues, clinical shifts, etc.) one and ONLY one unit exam may be dropped, final exam MUST be taken (cannot be dropped). The optional grading scale may be implemented please see instructions below. If you miss one-unit exam for any reason above, please send Dr. Pine the documented evidence within 1 day before/after the scheduled exam, this exam cannot be taken in a different time or different day BUT this missed exam will be dropped, and Option 2 will be used to determine your grade. In addition, if one and only one WileyPlus assignments is not completed for one of the reasons above it may be dropped at the end of the semester.

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.

Option 1							
WileyPlus Homework	10%						
Project	10%						
Forum/Participation	5%						
Unit Exam 1	15%						
Unit Exam 2	15%						
Unit Exam 3	15%						
Final Exam	30%						
Total	100%						

Option 2 (catastrophic life event)							
Lower unit-exam score is a drop							
WileyPlus Homework	10%						
Project	10%						
Forum/Participation	5%						
Unit Exam	15%						
Unit Exam	15%						
Final Exam	45%						
Total	100%						

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 <u>lowest (missed)</u> exam and the final grade will be calculated using Option 2. Please

note: students <u>are not</u> 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 Grading:**

Forum is graded weekly. There are two options only for Forum grading 0 and 1. A student is required to post <u>at least one time a week</u> in the forum, each post will grant 1 point per post (posting more than once is encouraged but will not grant additional points). Additional Forum activities if assigned will be announced through Sakai/Announcements or Sakai/Forum 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 using table above. Please follow Forum etiquette policies on Sakai under Syllabus.

Forum Participation: 5 most active Forum participants will be given 10% 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%+10%=107% It will be incorporated in the final grade as 107\*0.05+rest of the components.

#### **Project:**

Projects will include students' presentations on preselected topics (more details will be posted on Sakai and given in class) and one Forum post per presentation (presenting students will need to post two posts per their presentation). These Project Forum postings will be a part of the Project component of the grade and will NOT be a part of Forum/Participation component. All points/scores will be converted to percentages for final grade calculation.

<u>All graded assignments including the exams:</u> Student's 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 carefully read all the directions and ask the professor if anything remains unclear. No requests for partial credit, alternative grading scales or any type of extra credit may be accommodated.

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

A	A-	B+	В	B-	C+	С	C-	D+	D	F
00- 95	94-90	89-85	84- 80	79-75	74-70	69-65	64-60	59-55	54-50	less than 50

Please note: that materials from this course (INCLUDING PROBLEM SETS, EXAM and DISCUSSION PROBLEMS/QUESTION) cannot be shared outside the course without the instructor's written permission (as reminded by the CAS Dean's Office memo, August. 2023). 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
- 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.

#### 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. Further information is available at http://www.luc.edu/sac/.

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 CHEM370 lecture) during the scheduled day for the test).

# **Recording of Zoom class meetings**

In this class software may 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 <u>only</u> 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 <u>only</u> 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: <a href="http://webapps.luc.edu/biasreporting">http://webapps.luc.edu/biasreporting</a>

#### **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: <a href="http://www.luc.edu/chemistry/forms/">http://www.luc.edu/chemistry/forms/</a> 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 (<a href="https://www.luc.edu/athleteadvising/attendance.shtml">https://www.luc.edu/athleteadvising/attendance.shtml</a>)

#### **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.

# **Online COVID-19 Class Policies Statement:**

Due to uncertain times we all found ourselves the policies of this class were modified to consider possible obstacles and include all possible flexibility with the due dates and exam formats. In addition, to minimize the uncomfortable online environment for some students, this class was designed to consider possible technology and personal difficulties. All these modifications are expressed in this document. All these modifications are expressed in this document and the Class Schedule on Sakai.

# 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.

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

- 1. \*\*Sensitive Content:\*\* Some case studies may describe medical 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 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 your institution. 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.