

Instructor: Chuan (River) Xiao **Phone:** 747-8657
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Class Meet: TR 12:00-1:20pm @ CCSB1.0202 **Office Hrs:** After class TR 1:30-2:30pm or by appointment

Scope: A study of the major physiological pathways for harnessing the energy needs of living systems; study of the synthesis and breakdown of fundamentally important bio-molecules and metabolites.

Objective: Students who complete this course will be able to using the principles and concepts of biochemistry learned in the class to understand new and unfamiliar systems.

Prerequisites: This is a continuation of CHEM 3330 (Biochemistry I) and it is required that CHEM 3330 be taken prior to this course.

Class Meetings: Tuesday & Thursday 12:00-1:20pm at CCSB1.0202
(All cell phones and pagers should be turned OFF during class!!!)

Required Materials: 1. Lehninger *Principles of Biochemistry* 6th Ed.; Nelson and Cox; W. H. Freeman Company, New York, ISBN 13: 9781464165856. Student can also use the E-book in Sapling Learning (ISBN 13: 9781464170683). The student can use the 5th Ed of the book but the lecture page references will refer to the 6th Ed.

2. Student will need to do **BOTH** the on-lecture quizzes (Qz) and the **pre-lecture assignment (PLA)** to obtain their Q&P average score that can be counted into their final score.

A. I>Clicker¥ will be required for all on-lecture quizzes. It is student's responsibility to purchase and maintain a working I>Clicker during the semester. Students have two weeks of time at the beginning of the semester to purchase and test their i>Clickers. Please carry spare batteries to every class to avoid missing quizzes. **FORGOTTEN I>CLICKER OR LACK OF BATTERIES OR I>CLICKER MALFUNCTION AFTER THE FIRST TWO WEEKS OF THE SEMESTER WILL NOT BE A VALID EXCUSE FOR MISSING QUIZZES!!!!**

¥This semester, UTEP and the i>clicker vendor have agreed that the students can also try the on-line voting system REEF Polling without additional charge. You are welcome to try REEF using your smartphone or your laptop. However, i>clicker hardware based voting is still the preferred way for the on-lecture quizzes this semester and REEF Polling will be your backup way to vote for the on-lecture quizzes. The instructor does not take response for technical difficulties or reliability issues of using REEF for this semester.

B. Account on Sapling Learning for all PLA. It is student's responsibility to purchase the service from www.saplinglearning.com so that you can login and finish the on-line PLAs. It is student's responsibility to have required computer/network hardware and software to accomplish the PLAs. Students have two weeks of time at the beginning of the semester to test and try the sapling website and two PLAs to get familiar with the system without affecting their Q&P average score. **AFTER THE FIRST TWO WEEKS, NO COMPUTER/NETWORK EXCUSE WILL BE TAKEN FOR MISSING PLAs.**

Review Sessions: After the exams, students can review the exams during the office hours. However, there will be **NO REVIEW SESSIONS** before exams. Questions should be addressed in class or office hours.

Quizzes, PLA & Exams: There will be quizzes, PLAs and exams, all contribute to the final grade.

Quizzes: There will be a quiz given at every lecture that will also serve as a record of attendance. Quiz questions will be given at the very beginning of class. **ARRIVE IN CLASS ON TIME AND REVIEW THE PREVIOUS LECTURE.** Furthermore, there will be several quiz questions during the lecture. Bonus points will be given for quizzes (see below in section of **Bonus Points**).

PLAs: There will be weekly PLAs that require students to read the materials **IN ADVANCE.** The PLAs are reviewed by the instructor but prepared, given and graded by *Sapling Learning*.

Exams: There will be four exams. Each exam covers ¼ (three chapters) of the materials.

Academic Integrity Policy: Suspected cases or acts of alleged scholastic dishonesty (CHEATING) in quizzes, PLAs or exams will be dealt with University regulations. This means automatic referral to any adjudication by the Dean of Students.

**Course
Grading:**

Final grades in the course will be determined using scores on quizzes, PLAs and exams.

1. The quiz average score (80%) and PLA score (20%) will be combined together to contribute for one score as Q&P score. Q&P scores for the first two weeks will not be counted into final Q&P score however they will serve as bonus points (see below in section of **Bonus Points**).
2. The lowest score in Q&P and four exam scores can be dropped and the remaining 4 scores will each contribute 25% of the final score. Letter grades will not be assigned for score of Q&P and individual exams. The actual score of Q&P and individual exam will be converted to number of points for the final score.
3. Depending on the overall performance of the class, letter grade will be assigned based on the final score. Based on the overall performance of the class after the second exams, the criteria for assigning the letter grade will be set and announced in the middle of the semester before the class-withdraw deadline. The criteria will not be changed till the end of the semester. All the daily quiz scores, Q&P average score, exam scores and current rank in the class will be posted on Blackboard. Individual PLA score will be available on *Sapling Learning* website (www.saplinglearning.com).

**Class
Attendance:**

CLASS ATTENDANCE IS REQUIRED: Attendance will be routinely taken in the form of a **daily quiz and randomly-called questions during the lecture**. Students will be called by name randomly to answer questions. Students are responsible for attending lecture regularly and knowing what takes place during classes. This includes not only the material covered in the class, but also all announcements, changes in the syllabus, etc.

IF you MUST miss a class, YOU need to make a special effort to learn what occurred during your absence. You also need to submit verifiable documents to be approved by the instructor for your absence to get documented absences (DA) so that it will not affect your quiz average and semester attendance bonus points. The documents must from a third party. Letters or emails from the student who will be absence cannot serve as valid document for the absence. Without approved documents, zero score will be included in your quiz average and you will lose your semester attendance bonus. Absence documents that are submitted two weeks later than the absence date will NOT be accepted. Your first absence will be automatically waived (waived absence, WA) without counting its zero quiz score in the quiz average. However, you do lose points for semester attendant bonus (see below in section of **Bonus Points**).

**Quiz, PLA and
Exam Policy:**

1. *Quiz Rules:* Students are allowed to look your textbook. Students are not allowed to talk to their classmates. Asking classmates to taking/voting for you will be treated as cheating.
2. *PLA Rules:* Students will have several days (normally one week in advance) to finish the PLAs. The PLA will be due in Monday evening except special announcements. NO EXTENSION OF DEADLINE will be given after the due time because the correct answers will be available after the deadline.
3. *Exam Rules:* Students should wait outside the exam room before instructor finish preparing the room. Students will be **assigned** to their seats by the proctors. Proctors have the rights to re-seat the students. Students are highly suggested to go to the restroom before the exam. During the exam, only one student a time can go to the restroom and will be accompanied by one proctor. Remove baseball caps. Do not look around. No talking, no joking, no sharing of pencils and erasers. Cellular phone and all other electronic devices must be turned off and put away. All belongs must be put on the floor on the side or in front of the classroom and put away out of sight. **NO calculators or other electronic devices are allowed.** Only pencil, eraser and Scantron sheet are allowed to be used during the exam. Do not disrupt students around you if you finish the exam earlier. Suspicious activity will be dealt with accordingly.
4. In order to drop an exam, you must have taken the exam or prepare documents before the exam to state your dropping. NO ZEROS WILL BE DROPPED!
5. THERE WILL BE NO MAKE-UP TESTS/EXAMS IN THIS COURSE! The missed exam will be the one you drop if you have a DOCUMENTED EXCUSED ABSENCE. The documents must submit and approved **BEFORE** the exam.
6. ONLY ONE score in Q&P average and four exams can be dropped.
7. Please go over your exams when you come to review them and check for adding/grading errors. Except for clerical errors, re-grade requests will be a reevaluation of the entire exam. Be aware that returned Scantrons will be photocopied prior to handing back!

Bonus points: Every student can earn bonus points as shown below. **NO EXTRA CREDITS** will be given.

1. *Daily quiz bonus:* Bonus points equal to one question will be given for each lecture to who answer all the questions (attendance bonus). Additional bonus points equal to one question will be given for each lecture to who answers all quiz questions correctly (champion bonus).
2. *Semester attendant bonus points:* Bonus points will be given to students' Q&P average: 5 points if attended all the classes; 4 points if attended all the classes except documented absence (DA); or 2 points if attended all but one class (one waived absence but no other missing class except document absence).
3. Before calculating the quiz average score, the lowest quiz score will be dropped if you do not have any WAs or DAs.
4. The lowest PLA score will be dropped before calculating the average. Missing PLA (zero scores) will not be treated as lowest score.
5. The scores of PLA and quizzes for the first two weeks will be added to your average score calculation only if they are higher than your average.
6. If time allow, we will do a Co-generated dialogue around spring break using the no class session. It is for teaching feedback to improve the teaching. It will be voluntary but participants will get 0.5 bonus point to their final score.
7. In certain year, we will have research-teaching integration session at the end of the semester. It is to develop new teaching methods to improve student ability to apply what they learned in real problems. Participants can receive 1 bonus point to their final score if they perform well.

Withdrawal Policy:

There is a deadline (Mar. 30th) after the Exam 2 for student to withdraw from any course with an automatic "W". Please note that it is the student's responsibility to officially withdraw from the course. The College of Science (CoS) aligns with UTEP with respect to the drop date and will not approve any course withdrawals after that date. There are always extenuating circumstances such as a death in the family or an illness; therefore, CoS will approval a complete withdrawal of all courses – not just one course in these cases. Biochemistry I (CHEM 3332) is a very demanding and challenging course. Students need to spend a lot of time to study the material outside the classroom. Please consider seriously when you cannot improve your score because you don't have enough time to study. The grades of Incomplete "I" must be accompanied by an Incomplete Contract that has been signed by the instructor, student, departmental chair, and the dean. The CoS requests the contract be limited to one month based upon completion data. A grade of "I" is only used in extraordinary circumstances confined to a limited event such as a missed exam, project, or lab. If the student has missed a significant amount of work (e.g. multiple assignments or tasks), a grade of Incomplete is not appropriate or warranted.

Disability:

If you have or suspect a disability and need accommodations, you should contact The Disabled Student Services Office (DSSO) at 747-5148. You can also email the office at dss@utep.edu or go by the Union Building East, Room 106. For additional information, visit the DSSO website at www.utep.edu/dsso/.

Tentative Schedule for material to be covered*

Events	Date	Assignment
Introduction	January 16 th	First day of classes, Review syllabus, Intro to i>clicker
Lecture 1	18 th	Part II Introduction, Chapter 13.1, 13.2 (page 6e501-517; 5e485-501)
PLA 1	22nd	Lecture 1 to 3**;
Lecture 2	23 th	Chapter 13.3, 13.4 (page 6e 517-537; 5e502-521); Chapter 14.1 (page 6e543-545; 5e527-529)
Lecture 3	25 th	Chapter 14.1 (page 6e545-558;5e529-543)
PLA 2	29th	Lecture 4 to 5**;
Lecture 4	30 th	Chapter 14.2, 14.3, 14.4, 14.5 (page 6e558-581;5e543-563); Chapter 15.1 (page 6e587-588;5e570-571)
Lecture 5	February 1 st	Chapter 15.1, 15.2, 15.3 (page 6e588-605;5e5e571-587)
PLA 3	5th	Lecture 6 to 8**;
Lecture 6	6 th	Chapter 15.3, 15.4, 15.5 (page 6e606-623;5e588-605)
Lecture 7	8 th	Chapter 15.5 (page 6e623-627;5e605-609); Chapter 16.1, 16.2 (page 6e633-648; 5e615-629)
Exam 1	13th	Exam 1 12:00pm-1:20pm @ CCSB 1.0202
Lecture 8	15 th	Chapter 16.2, 16.3, 16.4 (page 6e642, 645, 648-659; 5e624, 626, 629-641); Chapter 17.1 (page 6e667-673; 5e647-653);
PLA 4	19th	Lecture 9 to 10**;
Lecture 9	20 th	Chapter 17.1, 17.2, 17.3 (page 6e673-688; 5e653-668)
Lecture 10	22 nd	Chapter 18.1, 18.2 (page 6e695-710; 5e673-687)
PLA 5	26th	Lecture 11 to 12**;
Lecture 11	27 th	Chapter 18.2, 18.3 (page 6e710-726; 5e687-702);
Lecture 12	March 1 st	Chapter 19.1 (page 6e731-747; 5e707-722)
Exam 2	6th	Exam 2 12:00pm-1:20pm @ CCSB 1.0202
Break	8th	Co-generated dialogue
Break	13 th	Spring Break, no classes
Break	15 th	Spring Break, no classes
PLA 6	19th	Lecture 13 to 14**;
Lecture 13	20 th	Chapter 19.2, 19.3, 19.4, 19.5, 19.6 (page 6e747-771;5e722-744);
Lecture 14	22 nd	19.7, 19.8, 19.9, 19.10 (page 6e771-792; 5e744-764);
PLA 7	26th	Lecture 15 to 16**;
Lecture 15	27 th	Chapter 20.1, 20.2 (page 6e799-818; 5e773-791)
Lecture 16	29 th	Chapter 20.3, 20.4, 20.5 (page 6e818-827; 5e791-800); Chapter 21.1, 21.2 (page 6e833-835; 5e805-807)
Drop Day	29th	* Course Drop Deadline *
PLA 8	April 2nd	Lecture 17 to 19**;
Lecture 17	3 rd	Chapter 21.1, 21.2 (page 6e835-852; 5e807-824)
Lecture 18	5 th	Chapter 21.2, 21.3, 21.4, 21.5 (page 6e852-875; 5e824-845);
Exam 3	10th	Exam 3 12:00pm-1:20pm @ CCSB 1.0202
Lecture 19	12 th	Chapter 21.5 (6e875-876;5e845); Chapter 22.1, 22.2 (page 6e881-892; 5e851-863)
PLA 9	16th	Lecture 20 to 21**;
Lecture 20	17 th	Chapter 22.2, 22.3, 22.4 (page 6e893-910; 5e864-882)
Lecture 21	19 th	Chapter 22.4(page 6e910-925; 5e882-896);Chapter 23.1(page 6e929-932; 5e901-904)
PLA 10	23rd	Lecture 22 to 24**;
Lecture 22	24 th	Chapter 23.1, 23.2 (page 6e932-948; 5e904-919)
Lecture 23	26 th	Chapter 23.2, 23.4, 23.5 (page 6e949-961; 5e920-931)
Lecture 24	May 1 st	Chapter 23.5 (page 6e961-971; 5e931-940)
RTI	3rd	BUILD-RTI module
Exam 4	8th	Exam 4 1:00pm-2:30pm @ CCSB 1.0202

* We may end up going slower or faster depending on how the class is doing or unpredictable events. The exam dates might also be affected and changed.

** PLAs are designed for you to study ahead of lectures. The lecture coverage listed in the table will be approximate which might be off because of balance between different PLAs and depending on the lecture progress.

*** Depend on the progress of the class such as we are way behind the schedule, we might have class on that day. If time allow, we might use that day for co-generated dialogue to collect teaching feedbacks.