

Chemistry 3330**Biochemistry I; Structure and Function****Instructor:** Ricardo Bernal**Phone:** 747-6918**Office:** CCSB 2.0406**Email:** rbernal@utep.edu**Class Meets:** MWF 9:30-10:20am UGLC 116**Office Hrs.:** MWF 10:30-11:30 am by Zoom.
or make an appointment**Teaching Assistant:** Alex Rodriguez (email is arodriguez109@miners.utep.edu)**There is a NO FOOD OR DRINK policy for the UGLC classrooms, labs, and auditoriums****Scope:** A study of the fundamentals of Biochemistry including the building blocks of all proteins, the three-dimensional structure of proteins, protein and enzyme function, nucleic acids, and biological membranes.**Class Meetings:** MWF 9:30-10:20am UGLC 116 in person and zoom. All exams are **IN-PERSON****Required Materials:**

- **Lehninger Principles of Biochemistry 8th Ed.**; Nelson and Cox; W. H. Freeman and Company, New York
- **>Clicker REEF Polling account** (<http://reef-education.com>) **and a wi/fi enabled device (phone or tablet)** will be required for all quizzes. The REEF account is free to all UTEP students so please use your UTEP credentials.

Review Sessions: There will be a review session the lecture before the date of an exam. Questions can also be addressed in class or office hrs.**Course Grading:** Final grades in the course will be determined using scores on quizzes and exams. A straight average of the four exams plus the overall quiz average (minus the lowest grade). You **MUST** take an exam to drop it. **Zeros from missed unexcused exams cannot be dropped.** Of the five scores, you can drop the lowest and the average of the remaining 4 scores will be the final grade for the course. A curve may or may not be applied to the final class average and is at the discretion of the instructor. Begging for a grade change at the end of the semester is highly discouraged as this will not work since it is unfair to the rest of the class. Your grade is in your hands and only you can change it by studying and doing well. The instructor only reports the grade that you earn. All requests for reports or extra work will be rejected as this is not fair to others in the class and doesn't accurately reflect your performance in the course.**Grade of Incomplete is rarely granted in this class.** All exams must be completed during the regular semester.**No student will ever be administratively dropped after the deadline.** You need to drop yourself!**Quizzes and Exams:** **THERE WILL BE DAILY ICLICKER QUIZZES** (cumulatively contribute towards final grade in combination to the 4 Exams). Iclicker averages is the equivalent to an exam grade.

- **Quizzes:** There will be a quiz given at the start and end of every lecture that will also serve as a record of attendance. FURTHERMORE, additional quizzes will be given during the lecture. In other words, there may be an unlimited number of quizzes during the lecture.

Exams: 4 exams will be given in-person and will be spread out over the semester. The exams will be administered during the regular class time. No virtual exams will be given.**** Missed Unexcused exams and quizzes count as a ZERO! ****Exams are designed to test your ability to apply the principles and concepts of biochemistry to new and unfamiliar situations. **THERE WILL BE NO MAKE-UP TESTS/EXAMS OR QUIZZES IN THIS COURSE.** An excused missed exam will simply be the one that is dropped. Unexcused missed exams will be assigned a zero.**Exams are multiple choice so please bring a form 882-ES scantron to each exam. It's the smaller green ones as pictured on the left.**

Studying for exams: **Warning! Exams are difficult and require a lot of study and review of material. If you do not study from the textbook, you WILL do poorly in this course.** Memorization of material is a very bad strategy in this course. The best way to study is to read a paragraph in the textbook then to summarize it on a separate piece of paper in your own words. If the two paragraphs match, then you understood the material. If you cannot summarize it after reading it then you didn't grasp the material and you need to review it again. Then for an exam, you can simply study from the summaries that you wrote down and you should do well on the exam. I highly recommend forming a study group with others in the class!!!!!! I have seen that students that do that consistently do better on the exams.

Absences: Only a **documented excused absence** will be considered. If you miss an exam or daily quiz you must present a written document proving you could not be present. Missed exams or quizzes that have a university recognized excuse will be dropped and will not count toward the overall course grade.

Course Curve: A curve will be applied to the **final** overall course grade, if necessary, to bring the overall class average to 75%.

Academic Dishonesty: Please visit my office to review an exam after it has been given and check for adding/grading errors. Except for clerical errors, re-grade requests will be a reevaluation of the entire exam. Suspected cases or acts of alleged scholastic dishonesty (CHEATING) will be automatically referred to the Dean of Students' Office.

Exam Rules;

- If you arrive late and if someone has already turned in their exam, then you will not be allowed to take the exam. In other words, once someone turns in an exam, no one else can start on an exam.
- **Turn OFF phones and put them away in your backpack** or pocket. Phones on the desk will get you in trouble because we will assume you are Googling answers.
- Remove baseball caps and all hats
- Listening to music is not allowed! Remove all headphones or ear-buds and put them away.
- Go to restroom before exam. If you must go to restroom, you will be asked to empty your pockets (leave phone behind) and you will be escorted to and from the restroom by a TA.
- No talking (obviously). **Don't even say bless you if someone sneezes.**
- No sharing of pencils, pens, erasers, calculators. You are to share **nothing** during an exam.
- **No cell phone use during exams.** Phones must be put away in pocket or backpack.
- No talking or joking during an exam.
- Try not to disrupt those around you after you finish an exam.
- No looking around at exams of others sitting near you. People with wondering eyes will be asked to move to another seat. There are so many versions of the exam that it's impossible to cheat anyway.
- All belongings (especially electronics) must be on the floor and put away out of sight.
- No drinks, cups, food, etc. are allowed on your desk during an exam.
- No cheat-sheets (these will earn you an automatic zero and a trip to the Dean of Students to explain yourself).
- Even suspicious activity (especially with cell phone use) will be dealt with accordingly.

Withdrawal Policy: The last day for you to withdraw from any course with an automatic "W" is listed in the official university calendar (April 1, 2022). Please note that it is the student's responsibility to officially withdraw from a course before the drop deadline. No student will be administratively dropped after the deadline due to poor performance and bad grades.

Class Attendance: Class attendance is required. Attendance will be routinely taken in the form of daily quizzes. 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, handouts, 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 from your peers.*

COVID-19

Precautions: Please do not come to class if you are sick. Wear a mask properly while attending in person. Maintain as much distance from others as possible.

Disability: If you have or suspect a disability and need accommodations you should contact Disabled Student Services Office (DSSO) at 747-5148 or at dss@utep.edu or visit Room 106 Union East Building.

REEF Polling by i>clicker

I will be using REEF Polling by i>clicker in class this term. REEF Polling helps me to understand what you know, gives everyone a chance to participate in class, and allows you to review the material after class. I will use REEF Polling to keep track of attendance. Participation with REEF Polling will account for 20% of your final grade. You will need to create a REEF Polling account to vote in class using your laptop, smart phone, or tablet connected to the university's Wi-Fi (UTEP-secure).

Creating Your REEF Polling Account

Go to <http://reef-education.com> or **download the REEF Polling app** for Android or iPhone/iPad to sign up for a REEF Polling account. You should use your university email address and ID in the Student ID field. If you need to change your email address, password, or student ID, edit your account profile. **Do *not* create and use more than one REEF Polling account as you will only receive credit from a single account.**

Add This Course to Your REEF Polling Account and Sync it to your BlackBoard Account

- a. To do this, make sure you have a REEF account set up (it should be free to all UTEP students if you use your UTEP credentials).
- b. Log into BlackBoard and go to the home page.
- c. Click on the iClicker REEF link to login to your REEF account.
- d. That's it. Your REEF account should now be synced with BlackBoard.
- e. You only need to do this once and the sync up with be there for the rest of the semester.

Cheating

I consider submitting REEF votes for a fellow student to be cheating and a violation of the University Honor Code. If you are caught voting for another student or have votes in a class that you did not attend, you will receive a zero for ALL quizzes and will face additional disciplinary action by the University.

Tentative Schedule for material to be covered

We may end up going slower or faster depending on how the class is doing

Date	Tentative Date	Assignment
Lecture 1	January 19, 2021	First day of classes, Review syllabus, Intro to Reef, Research recruitment talk
Lecture 2	January 21, 2021	Chapter 2 Water
Lecture 3	January 24, 2021	Chapter 2 Water
Lecture 4	January 26, 2021	Chapter 2 Water Continued
Lecture 5	January 28, 2021	Chapter 3 Amino Acids, Peptides and Proteins
Lecture 6	January 31, 2021	Chapter 3 Amino Acids, Peptides and Proteins Continued
Lecture 7	February 2, 2021	Chapter 3 Amino Acids, Peptides and Proteins Continued
Lecture 8	February 4, 2021	Exam 1 Review Session
Exam 1	February 7, 2021	Exam 1
Lecture 9	February 9, 2021	Chapter 4 The three-dimensional structure of proteins
Lecture 10	February 11, 2021	Chapter 4 The three-dimensional structure of proteins continued
Lecture 11	February 14, 2021	Chapter 4 The three-dimensional structure of proteins continued
Lecture 12	February 16, 2021	Chapter 4 The three-dimensional structure of proteins continued
Lecture 13	February 18, 2021	Chapter 5 Protein Function
Lecture 14	February 21, 2021	Chapter 5 Protein Function Continued
Lecture 15	February 23, 2021	Chapter 5 Protein Function Continued
Lecture 16	February 25, 2021	homework study aid, no in-person class
Lecture 17	February 28, 2021	Chapter 6 Enzymes, CLASS by Zoom only. No in person class.
Lecture 18	March 2, 2021	Chapter 6 Enzymes Continued
Lecture 19	March 4, 2021	Chapter 6 Enzymes Continued
Lecture 20	March 7, 2021	Exam 2 Review Session
Exam 2	March 9, 2021	Exam 2
Lecture 21	March 11, 2021	Chapter 7 Carbohydrates and Glycobiology
Lecture 22	March 14, 2021	Spring Break - No Classes
Lecture 23	March 16, 2021	Spring Break - No Classes
Lecture 24	March 18, 2021	Spring Break - No Classes
Lecture 25	March 21, 2021	Chapter 7 Carbohydrates and Glycobiology Continued
Lecture 26	March 23, 2021	Chapter 7 Carbohydrates and Glycobiology Continued
Lecture 27	March 25, 2021	Cesar Chavez Day - No Classes
Lecture 28	March 28, 2021	Chapter 8 Nucleotides and Nucleic Acids
Lecture 29	March 30, 2021	Chapter 8 Nucleotides and Nucleic Acids Continued
Lecture 30	April 1, 2021	Chapter 8 Nucleotides and Nucleic Acids Continued
Lecture 31	April 4, 2021	Chapter 9 DNA Based Information Technologies
Lecture 32	April 6, 2021	Chapter 9 DNA Based Information Technologies Continued
Lecture 33	April 8, 2021	Chapter 9 DNA Based Information Technologies Continued
Lecture 34	April 11, 2021	Exam 3 Review Session
Exam 3	April 13, 2021	Exam 3
Lecture 35	April 15, 2021	Spring Study Day - No Classes
Lecture 36	April 18, 2021	Chapter 10 Lipids
Lecture 37	April 20, 2021	Chapter 10 Lipids Continued
Lecture 38	April 22, 2021	Chapter 10 Lipids Continued
Lecture 39	April 25, 2021	Chapter 11 Biological Membranes and Transport
Lecture 40	April 27, 2021	Chapter 11 Biological Membranes and Transport Continued
Lecture 41	April 29, 2021	Chapter 11 Biological Membranes and Transport Continued
Lecture 42	May 2, 2021	Exam 4 Review Session
Exam 4	May 4, 2021	Exam 4
Lecture 5	May 6, 2021	DEAD DAY - No Classes

Dates are tentative and subject to change if lectures go faster or slower.