

Course Information

Chemistry 314: General Biochemistry Fall 2015

Course: Chemistry 314 meets MWF from 1:00-1:50 p.m. in room STC 122

Instructor: Dr. Stephen D. Starnes Office: Science 339

Office Hours: Monday-Friday 11:00 am - noon and by appointment

Contact Information: 903-886-5389, stephen.starnes@tamuc.edu

Text: Lecture: Principles of Biochemistry, 5th edition, Authors: Horton, Moran,
et. al., ISBN: 978-0-321-70733-8

Grading

Your course grade (1000 points total) will be broken down as follows: three in-class exams out of four (250 points each, 25% each, 75% total of the course grade) and a comprehensive final examination (250 points, 25% of the course grade)

Three exams out of four 250 points ea., 25% of course grade ea., 75% total

Final examination 250 points, 25% of course grade

(100% course grade)

There will be absolutely no make-ups for exams. You will be allowed to drop one of the first 4 exams if you are not absent more than 5 lectures. If you miss one of the first 4 exams, that grade will be dropped if you do not miss more than 5 lectures during the semester. If you miss more than one exam you will be assigned a grade of zero for the missed assignment(s). There will be NO extra credit assignments in the course. The last drop date for the course is *November 5, 2015*. Grading will be based on a standard percentage scale: 100-90 = A; 89-80 = B; 79-70 = C; 69-60 = D; 59-below = F. Dishonest scholarship will earn an automatic zero (0) and initiate prosecution to the fullest extent. Incomplete grades may be given only if the student has a current average $\geq 70\%$ and is precluded from completion of the course by a documented illness or family crisis.

If you miss more than 5 lectures (13% of the lectures) during the course of the semester, this will be an indication to me that you fully understand the material and don't feel that you need the lectures. You should thus be able to excel on the exams and not have a need to drop an exam. Your grade will thus be based on all four exams and the final.

Exam 1:	Monday	September 28th	Chapters 1-4
Exam 2:	Monday	October 26th	Chapters 5-8
Exam 3:	Monday	November 16th	Chapters 9-13
Exam 4	Friday	December 11th	Chapters 14-19
Final Exam:	Friday	December 18th	Cumulative (Chapters 1-19)

Tentative Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
<u>August-September</u>	31st Chapter 1	1st	2nd Chapter 1	3rd	4th Chapter 2
<u>September</u>	7th Holiday	8th	9th Chapter 2	10th	11th Chapter 2
<u>September</u>	14th Chapter 3	15th	16th Chapter 3	17th	18th Chapter 3
<u>September</u>	21st Chapter 4	22nd	23rd Chapter 4	24th	25th Chapter 4
<u>September - October</u>	28th Exam 1, (Chap. 1, 2, 3, 4)	29th	30th Chapter 5	1st	2nd Chapter 5
<u>October</u>	5th Chapter 6	6th	7th Chapter 6	8th	9th Chapter 7
<u>October</u>	12th Chapter 7	13th	14th Chapter 8	15th	16th Chapter 8
<u>October</u>	19th Chapter 8	20th	21st Chapter 9	22nd	23rd Chapter 9
<u>October</u>	26th Exam 2 (Chap. 5, 6, 7, 8)	27th	28th Chapter 10	29th	30th Chapter 11
<u>November</u>	2nd Chapter 11	3rd	4th Chapter 12	5th <i>Last day to drop</i>	6th Chapter 12
<u>November</u>	9th Chapter 13	10th	11th Chapter 13	12th	13th Chapter 14
<u>November</u>	16th Exam 3 (Chap. 9, 10, 11, 12, 13)	17th	18th Chapter 14	19th	20th Chapter 15
<u>November</u>	23rd Chapter 15	24th	25th Chapter 16	26th <i>Thanksgiving Holiday</i>	27th <i>Thanksgiving Holiday</i>
<u>November-December</u>	30th Chapter 17	1st	2nd Chapter 17	3rd	4th Chapter 19
<u>December</u>	7th Chapter 19	8th	9th Chapter 18	10th	11th Exam 4 (Chap. 14, 15, 16, 17, 18, 19)
<u>December</u>	14th	15th	16th	17th	18th Final Exam 10:30 – 12:30 Chapters 1-19

Useful Learning Techniques

1. Read the chapter before class
2. Attend all lectures
3. Take good class notes
4. Ask questions in class if the material is not understood
5. Read the chapter several times
6. Correct ALL quizzes and exams & review them!!!
7. Work all of the in-text problems
8. Work ALL of the chapter end problems
9. Study consistently!!
10. Use supplemental material/questions
(Internet, other textbooks, etc.)
11. Use flash cards
12. Use a study group (3-5 people)
13. Take advantage of instructor's office hours
14. Take notes as you read the chapters
15. Summarize your lecture notes
16. Try the learning center (test anxiety/tutor)
17. Get a tutor
18. Use molecular models
19. Use instructors review notes/problems

This course demands the utmost in disciplined study habits, diligence in working problems, and the commitment to learn and understand the material. The only way to understand chemistry is to attend lecture and take quality notes, work problems, ask questions, and *work more problems!* The exams will focus on current material and may include problems similar to those found in the text.

DO NOT GET BEHIND!!!! Work LOTS of problems...then work some more!!

We will cover chapters 1-19 as scheduled in the outline.

LEARNING OUTCOMES / COURSE OBJECTIVES:

By the end of the semester I intend for my students to have realized a number of objectives.

1. All students must be able to readily identify various biomolecules such as amino acids, carbohydrates, nucleic acids, lipids, etc.
2. Know the metabolic pathways of amino acids, carbohydrates, lipids, and nucleotides.
3. Understand the structures of biomolecules such as proteins, polysaccharides, and DNA, RNA.
4. Understand enzymes, enzyme mechanisms and their role in metabolism.
5. Understand membrane structure and function.
6. Understand metabolic pathways, particularly glycolysis, gluconeogenesis, the citric acid cycle, electron transport and ATP synthesis, photosynthesis.
7. Know the importance of biochemistry and its relationship to various other disciplines such as organic chemistry and medicinal chemistry and our daily lives.

Attendance Policy: All students are expected to attend classes on a regular basis. The Department of Chemistry adheres to the attendance policy set by the University as stated in the most current Undergraduate Catalog. The attendance record is taken from a daily sign-in sheet. A student who is late by more than 5 minutes or fails to sign the sign-in sheet will be counted as missing a lecture. Excessive absence is defined as missing more than 10% of the lectures or more than 10% of the laboratory sessions without excusable reasons. Excessive absence will be reported to the Dean of the College and the Dean of Students. In addition, **according to the TAMU-Commerce Procedure 13.99.99.R0.01, if a student has excessive absences, the instructor may drop the student from the**

course. The instructor will only excuse an absence if the student provides, with appropriate documentation, an excusable reason allowed by the TAMU-Commerce Procedure 13.99.99.R0.01. Good class attendance will be necessary in order to pass this course.

Student Conduct Policy: All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment (see Student's Guidebook, Policies and Procedures, Conduct, TAMU-Commerce Procedure 13.02.99.R0.06). Any student engaging in disruptive behavior will be dismissed from class on the first offence. A second offence may constitute dismissal from the course with a failing grade.

Cheating and other Breaches of Academic Conduct: Academic cheating, plagiarism, and other forms of academic misconduct may result in removal of the student from class with a failing grade or may in extreme cases result in suspension or expulsion from the University as described in the Code of Student Conduct section of the Student's Guidebook A&M-Commerce Procedure 13.99.99.R0.10.

Students with Disabilities:

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact: Office of Student Disability Resources and Services, Texas A&M University-Commerce, Gee Library, Room 132, Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148, StudentDisabilityServices@tamuc.edu