Instructor: Edith Osborne, Ph.D.
Email: Edith Osborne, Ph.D.
Phone: 325-486-6629
Office: Cav 204A

Office Hours: Due to social distancing guidelines, office hours will be held by email, over the phone, or online using Blackboard Collaborate. Please email me with your name, course, suggest possible time(s), and also the topic, and I will be happy to meet with you virtually.

Course Information

Course Description
The chemistry of living organisms. Carbohydrates, lipids, proteins, vitamins, and related cellular constituents are considered.

Prerequisite and Co-requisite Courses
CHEM 3452 Organic Chemistry II and its prerequisites (General Chemistry I and II, Organic Chemistry I)

Student Learning Outcomes
After completion of this course students will be able to:
  • analyze complex chemical problems and draw logical conclusions.
  • understand and apply scientific reasoning in the chemical sciences.
  • demonstrate technical and analytical skills in chemistry and biochemistry.

Course Objectives
During this course, students will be:
  • Gaining factual knowledge (terminology, classifications, methods, trends)
  • Learning fundamental principles, generalizations, or theories
• Learning to apply course materials (to improve rational thinking, problem solving and decisions)

Course Delivery
To maintain academic quality while accommodating social distancing needs this semester, this course will use a split delivery model that combines face-to-face teaching with remote instruction. Exams and quizzes will primarily be given face-to-face during class times, but they may also be given either face-to-face or online Thursday evenings from 5:30-7:30 pm.

How Does It Work?
Your class will be divided and you will be placed into a smaller group of students to maintain physical distancing requirements in our assigned classroom space.

Your assigned group will receive a schedule of in-person class meetings. This schedule is not flexible. For instance, if you are supposed to attend class on a Monday, you cannot elect to go on Wednesday with another class group instead. You will have an assigned seat and attendance will be taken during each class meeting.

When you are not in the physical class, you will be responsible for completing assigned coursework in Blackboard. This work can be completed any time before the posted deadline.

Please refer to this Health and Safety web page for updated information about campus guidelines as they relate to the COVID-19 pandemic.

Required Texts and Materials

Technology Requirements
To successfully complete this course, students need to purchase access to Sapling Plus, including David L. Nelson and Michael M. Cox, Lehninger Principles of Biochemistry 7th ed. This is a combination of online and an ebook.

While some exams and quizzes will be given face-to-face, access to some exams and quizzes will be through Respondus Lockdown Browser and will be video recorded via Respondus Monitor. Respondus requires a desktop computer or laptop (not a Chromebook) and a webcam. For best results, use an ethernet cable to connect to your
Internet source instead of relying on Wifi. Refer to the Blackboard course for Respondus installation instructions. Respondus monitor requires the use of a web cam to record video.

You also need access to a printer. You will be required to print some documents, complete them by hand, and then scan them in using a scanner or smartphone. You will then need to be able to create a pdf and upload it to Blackboard.

For office hours, we will be using Blackboard Collaborate.

**Communication**

Faculty will respond to email and/or telephone messages within 24 hours during working hours Monday through Friday. Weekend messages may not be returned until Monday.

**Written communication via email:** All private communication will be done exclusively through your ASU email address. Check frequently for announcements and policy changes. In your emails to faculty, include the course name and section number in your subject line.

**Virtual communication:** Office hours and/or advising may be done with the assistance of the telephone, Collaborate, Skype, etc.

**Grading**

**Evaluation and Grades**

Course grades will be determined as indicated in the table below.

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Percent of Total Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily grades and homework</td>
<td>15</td>
</tr>
<tr>
<td>Quizzes</td>
<td>20</td>
</tr>
<tr>
<td>3 Regular Exams</td>
<td>45</td>
</tr>
<tr>
<td>Comprehensive Final Exam</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**Grading System**

Course grades will be dependent upon completing course requirements and meeting the student learning outcomes.

The following grading scale is in use for this course:

\[ A = 90.00-100 \text{ points} \]
Assignment and Activity Descriptions

Exams: There will be three 100 point regular exams during the semester and a comprehensive final exam of 150 points during the final exam period. Regular exams may be given in class or Thursday evening from 5:30-7:30. Exam questions will most likely be multiple choice and matching, but there may also be some short answer questions. Due to the cumulative nature of the course, some concepts from previous chapters may be necessary to solve problems in later chapters. Exams will not be curved. During exams, all items except your nonprogrammable calculator and pencil will be placed at the front of the room. You may not wear hats during the exam.

Make-up exams: No make-up exams will be given except for university-sponsored events. If you miss an exam for an accepted excuse, i.e. a death in your family or personal illness, the final exam score will be used to replace the missed exam. Only one exam can be replaced in this fashion. If you miss two exams, you will not pass the course. If you miss the final, you will not pass the course. If you have taken the three hour exams, you may use the final exam percentage score to replace your lowest exam score. Example: your exams are 60 pts, 70 pts, and 80 pts and your final is 100 pts. The final exam is worth 150 points, so 100 points is 100/150x100 = 67%, so you can replace the 40 pt exam with 67 pts.

Quizzes: Quizzes on selected pathways will be given throughout the semester. On the pathway quizzes, you will draw out the selected pathway in its entirety. This will allow more time for fair evaluation of other important course materials on the exams. No reference materials (notes, worked problems or text) may be used on paper quizzes. The lowest two quiz scores will be dropped. Quizzes missed for university-sponsored events or other excused absences must be made up within one week of the missed quiz.

Homework and activities: Online homework from Sapling Learning will be assigned. There will also be some on-line activities and homework on Blackboard. In calculating your grade, I will drop 10% of this category of points, so some assignments can be missed without it negatively affecting your grade.

Grading corrections: Any discussion of corrections must be made within three weekdays of the return of the assignment.
For in class activities, please be on time, refrain from eating, and turn off cell phones. Attendance will be taken at the beginning of each face to face meeting. You will have an assigned seat in class.

General Policies Related to This Course

All students are required to follow the policies and procedures presented in these documents:

- Angelo State University Student Handbook
- Angelo State University Catalog

Academic Integrity

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject to disciplinary action and possible expulsion from ASU.

The College of Science and Engineering adheres to the university’s Statement of Academic Integrity.

Accommodations for Students with Disabilities

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student’s responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the Student Disability Services website. The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dallas Swafford
Incomplete Grade Policy
It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 Grading Procedures for more information.

Student Absence for Observance of Religious Holy Days
A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 Student Absence for more information.

Title IX at Angelo State University
The University prohibits discrimination based on sex, which includes pregnancy, sexual orientation, gender identity, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination including: sexual assault, sex-based discrimination, sexual exploitation, sexual harassment, public indecency, interpersonal violence (domestic violence and/or dating violence), and stalking. As a faculty member, I am a Responsible Employee meaning that I am obligated by law and ASU policy to report any allegations I am notified of to the Office of Title IX Compliance.

Students are encouraged to report any incidents of sexual misconduct directly to ASU’s Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator at:

Michelle Boone, J.D.
Director of Title IX Compliance/Title IX Coordinator
Mayer Administration Building, Room 210
325-942-2022
michelle.boone@angelo.edu

You may also file a report online 24/7 at www.angelo.edu/incident-form.
If you are wishing to speak to someone about an incident in confidence you may contact the University Health Clinic and Counseling Center at 325-942-2173 or the ASU Crisis Helpline at 325-486-6345.

For more information about Title IX in general you may visit [www.angelo.edu/title-ix](http://www.angelo.edu/title-ix).

**Required Use of Masks/Facial Coverings by Students**

As a member of the Texas Tech University System, Angelo State University has adopted the mandatory [Facial Covering Policy](#) to ensure a safe and healthy classroom experience. Current research on the COVID-19 virus suggests there is a significant reduction in the potential for transmission of the virus from person to person by wearing a mask/facial covering that covers the nose and mouth areas. Therefore, in compliance with the university policy students in this class are required to wear a mask/facial covering before, during, and after class. Faculty members may also ask you to display your daily screening badge as a prerequisite to enter the classroom. You are also asked to maintain safe distancing practices to the best of your ability. For the safety of everyone, any student not appropriately wearing a mask/facial covering will be asked to leave the classroom immediately. The student will be responsible to make up any missed class content or work. Continued non-compliance with the Texas Tech University System Policy may result in disciplinary action through the Office of Student Conduct.

**Modifications to the Syllabus**

This syllabus, including grade evaluation and course schedule, is subject to modification. In particular, the COVID-19 pandemic may require significant changes in course delivery and content on potentially short notice.

**Course Schedule**

<table>
<thead>
<tr>
<th>Week of</th>
<th>Topic or Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/17</td>
<td>Chapter 1 The Foundations of Biochemistry</td>
</tr>
<tr>
<td>8/24</td>
<td>Chapter 2 Water</td>
</tr>
<tr>
<td>8/31</td>
<td>Chapter 3 Amino Acids, Peptides, and Proteins</td>
</tr>
<tr>
<td>9/7</td>
<td>Chapter 4 The Three-Dimensional Structure of Proteins</td>
</tr>
<tr>
<td></td>
<td><strong>Test #1 Approximate composition Chapters 1-3</strong></td>
</tr>
<tr>
<td>9/14</td>
<td>Chapter 5 Protein Function</td>
</tr>
<tr>
<td>9/21</td>
<td>Chapter 5 and Chapter 6 Enzymes</td>
</tr>
<tr>
<td>Week of</td>
<td>Topic or Module</td>
</tr>
<tr>
<td>---------</td>
<td>----------------</td>
</tr>
<tr>
<td>9/28</td>
<td>Chapter 6 continued</td>
</tr>
<tr>
<td>10/5</td>
<td>Chapter 6 Enzyme Kinetics</td>
</tr>
<tr>
<td></td>
<td><strong>Test #2 - Approximate composition Chapters 4-6a</strong></td>
</tr>
<tr>
<td>10/12</td>
<td>Chapter 7 Carbohydrates and Glycobiology</td>
</tr>
<tr>
<td>10/19</td>
<td>Chapter 7 and Chapter 8 Nucleotides and Nucleic Acids</td>
</tr>
<tr>
<td>10/26</td>
<td>Chapter 9 DNA-Based Information Technologies</td>
</tr>
<tr>
<td>11/2</td>
<td>Chapter 10 Lipids</td>
</tr>
<tr>
<td></td>
<td><strong>Test #3 – Approximate composition Chapters 6b-9</strong></td>
</tr>
<tr>
<td>11/9</td>
<td>Chapter 10</td>
</tr>
<tr>
<td></td>
<td><strong>Last Day to Drop Tuesday, November 10</strong></td>
</tr>
<tr>
<td>11/16</td>
<td>Review and finals</td>
</tr>
</tbody>
</table>

Comprehensive final exam: approximate composition Chapters 1-10
- Friday, November 20 10:30 a.m. – 12:30 p.m.
- Tuesday, November 24 8:00 a.m. – 10:00 a.m.

2. https://www.angelo.edu/catalogs/
4. https://www.angelo.edu/services/disability-services/
5. https://www.angelo.edu/content/files/14197-op-1011-grading-procedures
6. https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of
7. https://www.angelo.edu/services/title-ix/