Biology for Majors I (lecture)
BIOL 1306.002
Fall 2020

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Office Hours: By Zoom only, M-W-F 8am-9am & T-R 1pm – 2pm, or by appointment
Department: Biology
Class meeting time and place: MWF, 10:00-10:50; Live-stream using Zoom

Course Description
Fundamental principles of living organisms will be studied, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of cytology, reproduction, genetics, and scientific reasoning are included. Co-requisite(s): BIOL 1106 Biology for Science Majors I (lab)

Program Learning Outcomes
Each course objective and student learning outcome listed below corresponds to the Biology Department PLO 1, to develop knowledge of biological concepts.

Student Learning Outcomes
Upon successful completion of this course, students will:
1. Describe the characteristics of life.
2. Explain the methods of inquiry used by scientists.
3. Identify the basic requirements of life and the properties of the major molecules needed for life.
4. Compare and contrast the structures, reproduction, and characteristics of viruses, prokaryotic cells, and eukaryotic cells.
5. Describe the structure of cell membranes and the movement of molecules across a membrane.
6. Identify the substrates, products, and important chemical pathways in metabolism.
7. Identify the principles of inheritance and solve classical genetic problems.
8. Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins.
9. Describe the unity and diversity of life and the evidence for evolution through natural selection.

General Education Core Curriculum
The Texas Higher Education Coordinating Board has identified six core learning objectives: Critical Thinking Skills, Communication Skills, Empirical and Quantitative Skills, Teamwork, Personal Responsibility, and Social Responsibility. SFA is committed to the improvement of its general education core curriculum by regular assessment of student performance on these six objectives.

By enrolling in Biology for Majors I (lecture) you are also enrolling in a Core Curriculum Course that fulfills the Empirical and Quantitative Skills requirement. You will see this course on your D2L list.

At one point during the semester, you will receive an assignment that fulfills both the requirements of this course and the needs of Stephen F. Austin State University’s Core Curriculum Assessment Plan with the Texas Higher Education Coordinating Board. When you complete this one assignment, you need to upload the assignment to both your standard course dropbox determined by your Instructor and the “Core Curriculum” dropbox. The Core Curriculum dropbox will be identified by the Objective for which work is being collected. (Examples: Critical Thinking, Teamwork, Social Responsibility Empirical & Quantitative Skills, Personal Responsibility, Communication Skills-Written, Communication Skills-Written
& Visual, and Communication Skills - Oral & Visual.) Please note that this only applies to the approved assignment. All other assignments should be submitted according to regular class operations.

When you complete the assignment mentioned above, you will upload the assignment to both the Biology for Majors I (lecture) dropbox and the Empirical and Quantitative Skills] dropbox.

Please note that this only applies to the specific assignment listed in the matrix below. All other assignments should be submitted according to regular class operations. If you have any questions, please see your instructor, or contact the at Office of Student Learning and Institutional Assessment at (936) 468-1130.

The chart below indicates the core objectives addressed by this course, the assignment(s) that will be used to assess the objectives in this course and uploaded to the D2L Empirical and Quantitative Skills dropbox this semester, and the date the assignment(s) should be uploaded to the D2L Empirical and Quantitative Skills dropbox. Not every assignment will be submitted for core assessment every semester. Your instructor will notify you which assignment(s) must be submitted for assessment in the D2L Empirical and Quantitative Skills dropbox.

Objectives that are being formally assessed in this semester.

<table>
<thead>
<tr>
<th>Core Objective</th>
<th>Definition</th>
<th>Course Assignment Title</th>
<th>Date Due in D2L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empirical and Quantitative Skills</td>
<td>To include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.</td>
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</tbody>
</table>

Text and Materials
Looseleaf, eText and Mastering Biology

Mastering Biology (Mandatory by 4th class day, August 31, 2020)

Grading Policy
Lecture grade will be based on exams, homework and quizzes. The lecture grade will constitute three fourths (75%) of the total course grade. With the lab grade counting as one-fourth (25%).

Four one-hour exams worth 100 points each will be administered throughout the semester for a total of 400 points for exams. Mastering Biology assignments will account for 100 points. Therefore, a total of 500 points may be possible in the lecture part of this course.

4 exams at 100 points each......................... 400 points
Mastering Biology Homework......................... 100 points

500 points

Your total points received from all test will be divided by 500 (total points in lecture), thus providing a lecture average. I do not round-up grades at the end of the semester (an 89.97 is still a ‘B’). The time to be concerned about points is each day of the semester while you are preparing for the exams. Extra credit is not available to improve your grade.
A = 100 - 90.0%; B = 89.99 - 80.0%; C = 79.99 - 70.0%; D = 69.99 - 60.0%; F = 59.99% or below

CLASS CONDUCT:
Proper classroom behavior is expected of all students enrolled in this course. You are expected to be in your seats and in an appropriate condition that enable you to participate in all classroom activities when the class starts. Any student leaving early, or coming in late, is considered distracting to the class and will be dealt with accordingly.

Other troublesome behaviors are listed on the last page of this course policy and should be read thoroughly. I reserve the right to ask any student to leave the lecture room in order to prevent a student from distracting myself or the class. Any student who does not conform to this class policy, and is asked to leave the classroom, will be required to visit with me in my office before being allowed to return to the regularly scheduled lecture classes. There will be no exceptions to this policy.

In particular, the use of cellular phones, including text messaging, will not be tolerated. If you bring a cell phone into my classroom, be sure that it is turned off! At my discretion, a cell phone that audibly rings, is clearly visible, or is used in any way during lecture will either be turned over to me until the end of class, or the student will be required to leave the classroom for that lecture period. Any student that has a cell phone at their desk that audibly rings, or any student who uses a cell phone for ANY purpose during an examination, will receive a zero (0) for the examination. NO EXCEPTIONS!

POLICY ON ABSENTEEISM:
Regular and punctual attendance is expected. The value of a college education depends upon the student’s full participation. Because students are expected not merely to receive information passively or to pass examinations but to participate actively in class, it is important that unnecessary class absences be avoided. Students are expected to be present for all classes and no absence will be automatically excused.

Legitimate excuses for absences only affect whether students may be given an opportunity to make up work. Students will be responsible for all missed work. See Attendance Policy attached to this document.

If you come in late you must check with me after class in order to clear any record of absence for that day. This is your responsibility. Reoccurring tardiness should be explained. A seating chart will not be utilized in this course. Instead, an attendance sheet will be passed around on which you will put your signature next to your name. It is your responsibility to see that the role sheet is signed before leaving the lecture class. Do not sign in for another student; doing so will result in a significant reduction in your course grade and the assignment of seats for all students in the class. It is also your responsibility to keep up with the number of absences that you have accrued.

Some appropriate reasons for absenteeism are: an illness with dated medical notes; death in the immediate family with clippings from a newspaper announcing the death; scheduled athletic events; scheduled academic events. Other reasons can be discussed, but may not be excused. You are responsible to know what was announced and what material was covered in class during your absence. Lecture notes are not available from your instructor.

EXAMS
Exams will be online using the BrightSpace student learning platform. The final exam will be given online at the regularly scheduled final exam time. See course schedule for dates. All exams have a one hour time limit.
TARDINESS TO AN EXAM:
A student will not be able to begin taking the regularly scheduled exam once the first student has completed the exam. If a student comes to the exam late, at my discretion and with proper documentation, he/she may have the opportunity to take the make-up exam during dead week. The exception, no make-up exam due to tardiness will be given for the final exam.

MAKE-UP EXAMS:
Make-ups for hour exams will only be allowed in the case of a University approved absence (illness with a doctor's note, a family crisis, or a religious holiday). It is your responsibility to inform me that you missed the exam and why as soon as possible. YOU MUST NOTIFY ME, IN WRITING, WITHIN 24 HOURS OF A MISSED EXAM TO BE ELIGIBLE FOR A MAKE UP EXAM. Written documentation must be submitted that thoroughly supports you missing an exam.

You must contact me to schedule a makeup exam no less than one week prior to the agreed upon date during dead week. The make-up exam will be of a different format than regularly scheduled exams. The only exception to this is if you know you are going to miss class (e.g., University outing or field trip) - Then you will take the exam a day or two early. If you will miss an exam due to a University sponsored outing you must notify me before the exam date. I will use a different format for makeup exams than the exams given to the rest of the class. Missing or arriving late for the final exam is not an acceptable excuse. Set two alarm clocks, have friend call, or your mom/dad to wake you up in time to take the exam. Missing of an exam will result in a zero for the missed exam. THERE IS NO MAKE UP EXAM GIVEN FOR THE FINAL EXAM!

Academic Integrity (A-9.1)
Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

Definition of Academic Dishonesty
Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit.

Please read the complete policy at http://www.sfasu.edu/policies/academic_integrity.asp

Withheld Grades Semester Grades Policy (A-54)
Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

Students with Disabilities
To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/.

TROUBLESONE BEHAVIOR IN THE LEARNING ENVIRONMENT

Troublesome behavior may be classified as anything that disturbs or disrupts the learning environment. By avoiding the following negative behaviors, instructors and students can cooperatively establish a setting more conducive to learning:

- Use of cellular phones (this includes text messaging)
- Inappropriate or poorly-timed challenges to authority
- Demanding unwarranted preferential treatment
- Exhibiting an “I paid for this…” mentality
- Excessive tardiness
- Leaving early
- Making intentionally offensive remarks
- Using vulgar language or gestures
- Missing deadlines
- Holding private side conversations
- Reading unrelated publications
- Talking out of turn
- Shuffling backpacks and notebooks
- Overt inattentiveness or sleeping
- Poor preparation
- Use of personal computers or other electronic devices for other than note-taking

Important Notice:
The lecture classroom is not a movie theater. Be respectful of not only your professor but of your fellow classmates by not displaying any of the troublesome behaviors listed above. In the event any inappropriate behavior is displayed, I reserve the right to ask any student(s) during the lecture to leave the room in order to prevent them from distracting myself or the class. Any student who does not conform to this class policy, and is asked to leave the classroom, will be required to visit with me in my office before being allowed to return to the regularly scheduled lecture classes. There will be no exceptions to this policy.
<table>
<thead>
<tr>
<th>Date</th>
<th>TOPIC*</th>
<th>Chap</th>
<th>Pages</th>
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</thead>
<tbody>
<tr>
<td>Aug 24</td>
<td>Introduction to the Course</td>
<td></td>
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<tr>
<td>Aug 26</td>
<td>Evolution, Themes of Biology and Scientific Inquiry</td>
<td>1</td>
<td>2-26</td>
</tr>
<tr>
<td>Aug 28</td>
<td>Water and Life</td>
<td>3</td>
<td>44-55</td>
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<tr>
<td>Sep 2</td>
<td>Carbon and Molecular Diversity</td>
<td>4</td>
<td>56-65</td>
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<tr>
<td>Sep 7</td>
<td>Structure and Function of Large Biological Molecules</td>
<td>5</td>
<td>66-91</td>
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<tr>
<td>Sep 9</td>
<td>A Tour of the Cell</td>
<td>6</td>
<td>92-125</td>
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<td>18</td>
<td><strong>Exam #1 (Chapters 1, 3, 4 &amp; 5) – Friday @ 10:00 AM</strong></td>
<td></td>
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<tr>
<td>Sep 21</td>
<td>A Tour of the Cell</td>
<td>6</td>
<td>92-125</td>
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<tr>
<td>Sep 23</td>
<td>Membrane Structure and Function</td>
<td>7</td>
<td>126-142</td>
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<td>Oct 2</td>
<td>Introduction to Metabolism</td>
<td>8</td>
<td>143-163</td>
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<td>Oct 5</td>
<td>Cellular Respiration and Fermentation</td>
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<td>164-186</td>
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<td>Oct 7</td>
<td>Photosynthesis</td>
<td>10</td>
<td>187-211</td>
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<td>16</td>
<td><strong>Exam #2 (Chapters 6, 7, 8 &amp; 9) – Friday @ 10:00 AM</strong></td>
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<tr>
<td>Nov 2</td>
<td>Photosynthesis</td>
<td>10</td>
<td>187-211</td>
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<tr>
<td>Nov 23</td>
<td>The Cell Cycle</td>
<td>12</td>
<td>234-252</td>
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<td>Nov 26</td>
<td>Meiosis and Sexual Life Cycles</td>
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<td>253-268</td>
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<td>Nov 28</td>
<td>Mendel and the Gene Idea</td>
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<td>269-293</td>
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<td>Nov 30</td>
<td>The Molecular Basis of Inheritance</td>
<td>16</td>
<td>314-334</td>
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<td>Nov 9</td>
<td><strong>Exam #3 (Chapters 10, 12, 13 &amp; 14) - Monday @ 10:00 AM</strong></td>
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<tr>
<td>Dec 2</td>
<td>Gene Expression: From Gene to Protein</td>
<td>17</td>
<td>335-362</td>
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<tr>
<td>Dec 23</td>
<td>Thanksgiving Break</td>
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<td>Dec 25</td>
<td>Thanksgiving Break</td>
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<tr>
<td>Dec 27</td>
<td>Thanksgiving Break</td>
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<td>Dec 30</td>
<td>Decent with Modification</td>
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<td>9</td>
<td><strong>Exam #4 (Chapters 16, 17 &amp; 22) - Wednesday @ 10:45 AM</strong></td>
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