Biology for Science Majors I  
BIO 1306.500 Online

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Office Hours: TBA  
Department: Biology  
Class meeting time and place: TBA

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 Science 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 dropout determined by your Instructor and the “Core Curriculum” dropdown. The Core Curriculum dropdown 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 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>
<td>TBD</td>
<td>TBA</td>
</tr>
</tbody>
</table>

**Text and Materials**
ISBN 9780134082318

**Mastering Biology** (Mandatory by 4<sup>th</sup> class day)

**Course Requirements**
Describe the major course requirements, assignments, examinations, projects (including the core assessment collected in this course).

**Grading Policy**
Twelve quizzes worth 50 points each will be administered throughout the semester for a total of 600 points for exams. Twelve discussion questions will be asked during the semester. Students must contribute a substantive response to each question to obtain full credit. Twelve questions will be selected for grading for a total of 240 points. Mastering Biology assignments will account for 200 points. Therefore, a total of 1040 points may be possible in this course.

12 exams at 50 points each.................. 600 points
Participation (discussion groups) .......... 240 points
Mastering Biology Homework............... 200 points

Total 1040 points

Lab will count at 25% of your final course grade (350 points), while lecture will comprise 75% (1040 points).
Your total points received from all tests, discussion questions and Mastering Biology will be divided by 1040 (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.

\[
A = 100 - 90.0\%; \quad B = 89.99 - 80.0\%; \quad C = 79.99 - 70.0\%; \quad D = 69.99 - 60.0\%; \quad F= 59.99\% \text{ or below}
\]

The total points for Mastering Biology assignments will range from 200-400 points. However, these points will adjusted to a 200 point scale. (e.g., 300 points out of 400 points will be entered as \(\frac{300}{400} \times 200 = 150\) points).

**Mastering Biology Homework:**
Mastering Biology (www.masteringbiology.com) assignments will be posted at the beginning of new exam material.

**Attendance Policy**
Regular participation is required and will be assessed using quizzes, Mastering Biology and discussion forums.

**Academic Integrity (4.1)**
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.

I expect everyone to do his or her own, original work. This includes all homework assignments, exams and quizzes. All quizzes and exams are closed-book! I will take appropriate disciplinary action, as described in the University Student Handbook, against anyone that does not comply with this policy.

**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/4.1-student-academic-dishonesty.pdf](http://www.sfasu.edu/policies/4.1-student-academic-dishonesty.pdf).

**Withheld Grades Semester Grades Policy (5.5)**
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. For additional information, go to [http://www.sfasu.edu/policies/course-grades-5.5.pdf](http://www.sfasu.edu/policies/course-grades-5.5.pdf).

**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/](http://www.sfasu.edu/disabilityservices/).
Make-Up Work:
Make-ups for missed quizzes 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 WITHIN 24 HOURS OF A MISSED EXAM TO BE ELIGIBLE FOR A MAKE UP QUIZ. Written documentation must be submitted that thoroughly supports you missing an exam.