Biology I

Course Description
The course examines fundamental biological concepts that apply to all organisms and, as such, is suitable for all majors. General topics include scientific method, cytology, energetics, nucleic acids, and genetics. This course counts toward the natural science component of the University Core Curriculum.

Exemplary Education Objectives for Core Courses
These general objectives encourage students to view science as a way of knowing (learning, evaluating, discussing), and help them to relate and apply scientific concepts to their daily lives. They permeate all aspects of most courses in the natural sciences.

1. To understand and apply method and appropriate technology to the study of natural sciences.
2. To recognize scientific and quantitative methods and the differences between these approaches and other methods of inquiry and to communicate findings, analyses, and interpretation both orally and in writing.
3. To identify and recognize the differences among competing scientific theories.
4. To demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policies.
5. To demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to, modern culture.

Student Learning Outcomes
At the end of the semester, the student will be able to:
1. Discuss the basic concepts of chemistry as they relate to living organisms.
2. Describe how a living cell is constructed, and recognize the relationships among its components.
3. Explain the physical and chemical bases for the activities of living cells and elucidate how these activities are controlled.
4. Demonstrate familiarity with the cellular and molecular processes involved in inheritance.
5. Identify examples of recent advances in applied cellular and molecular biology and evaluate their impacts on society.

Major Course Requirements

A. Lecture (75% of final grade)

1. Lecture 1-hour Exams. The exams will cover specific assigned topics. They usually consist of multiple choice, fill-in the blanks, matching type and true-false questions. There are three lecture exams during the semester; each exam is worth 100 points (300 points total).
2. **Final Exam.** The final exam is comprehensive covering all lecture topics covered throughout the semester. Some exam questions are taken from previous lecture examinations but the questions are slightly modified. The exam is worth 200 points.

No student is admitted to an exam after the first exam taker has left.

3. **Quizzes.** Every lecture meeting, there are some questions for points and Qwizdom responders are used to answer these questions. The students are required to bring their functioning Qwizdom responders every lecture meeting and they must be present to answer the questions. They are not permitted to use another student’s responder. Answering questions for another student not present in lecture is cheating and will not be tolerated. There is NO make-up for missed quizzes. The quizzes are worth 100 points.

*Grading in lecture*

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<tr>
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<th>Points</th>
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<tbody>
<tr>
<td>One-hour exams</td>
<td>300</td>
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<td>(100 pts/exam x 3 exams)</td>
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<tr>
<td>Final Examination</td>
<td>200</td>
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<tr>
<td>Quizzes</td>
<td>100</td>
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**B. Laboratory (25% of final grade)**

The laboratory grade comprises grades in laboratory reports, worksheets, pre-lab quizzes and a practical exam.

<table>
<thead>
<tr>
<th>Final Letter Grade</th>
<th>Final Number Grade</th>
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<tbody>
<tr>
<td>A</td>
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<tr>
<td>B</td>
<td>80 - 89</td>
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<tr>
<td>C</td>
<td>70 - 79</td>
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<tr>
<td>D</td>
<td>60 - 69</td>
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<tr>
<td>F</td>
<td>0 - 59</td>
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**Required or Recommended Readings**


*Qwizdom Responder*: Required

**Computer Access**

Use of computer is a major part of this course. This includes use of email, list-serve, worldwide web and power point. Computers are available for student’s use in computer labs around campus. The campus Computer Lab is located in Corpus Christi Hall - Room 200. This lab is staffed with help personnel and has very generous operating hours. Each student has a computer account set up by the university that is available from the first day of class. Call the computer help line at x2692 for more information.
The power point lectures and lecture notes-study guides will be on BlackBoard.

To access BlackBoard:

- Go to TAMUCC home page: http://www.tamucc.edu
- Check BlackBoard and Login.
- If you have any problems logging into BlackBoard, please contact TAMUCC Island Online Help Desk at (361) 825-2825 or long distance 1-866-353-2491.
- After you have logged in, select the courses that you wish to browse.
e.g. Fall 2012 : BIOL-1406.001 - Biology I : Instructor: Stella Doyungan

Course Policies

**Attendance/Absences**
Students are expected to attend on time in every scheduled class and laboratory meeting. If a student is absent in the lecture, it is the student’s responsibility to obtain any material missed from a classmate. If a student is absent in the laboratory, the student will be given a zero grade for the laboratory activity performed that day. Make-up is only permitted for an excused absence and emergencies.

Students with University’s approved absence (athletics, military duty, others) must notify the instructor in advance of the scheduled absence. In case of emergencies, students should inform the instructor about the situation as soon as possible.

Proper documentation is required for excused absences. It must be in writing and signed by the person of authority (coach, doctor, funeral director). Personal reasons such as getting married, going on vacation, attending weddings, reunions, household or car repairs and NON-EMERGENCY medical or dental visits are not acceptable.

**Missed exam**
Special exam is given to students with excused absence (excused per TAMUC guidelines) and the format of such exam is ESSAY and SHORT ANSWER TYPES.

**Bonus points**
NO INDIVIDUAL extra credit projects or assignments will be available in this class. Opportunities to earn extra points however, are provided for the ENTIRE CLASS. These extra points are built as extra questions in the Qwizdom quizzes. These extra points cannot be made up.

**Cell phone/Electronic Device Usage**
Interruptions are disruptive to learning and will not be tolerated. Students are required to put their cell phones to silent mode during class. Taking pictures and sending text messages during class are not allowed.

Laptops, I pads or similar tablet PC usage is limited to class-related activities such as taking notes and looking at the PowerPoint lectures and study guides.

**Classroom behavior**
Students should sit and listen to class lecture. They may ask questions and participate in class discussion. They should refrain from talking loudly so they will not disturb the learning of other students.

**Academic Integrity**
University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism.
Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in:

**FIRST OFFENSE:** A stern warning and an **F** for the particular work/test (where the student is found to be dishonest);

**SECOND OFFENSE:** An **F** for the course

**Dropping a Class**
I do hope students will not drop in this class. However, in any event that students have to, please consult with me to make sure it is the best thing to do. When dropping this class, students are the one to initiate the process by going to the Student Services Center and fill out a course drop form. Please be reminded that just stopping attendance and participation in the class will not automatically result in the student being dropped from the class. Last day to drop the class with automatic grade of “W”, is November 2, 2012. Last day to withdraw from the University, is on December 3, 2012.

**Grade Appeals**
A student who believes that he has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is on the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, consult the University Rules and Procedures (accessible through the University Rules and Procedures website [http://www.tamucc.edu/provost/university_rules/index.html](http://www.tamucc.edu/provost/university_rules/index.html). For assistance and/or guidance in the grade appeal process, students may contact the Office of Student Affairs.

**Disabilities Accomodations**
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. Should you need special consideration for exams and/or class activities (special microphones, additional time for exams, enlarged exams, etc.) or other accommodations, please contact the Disabilities Services Office at (361) 825-5816 or visit the office in Driftwood 101. The university will provide assistance as needed, but you must contact the center to make arrangements. The instructor cannot make modifications without the center’s involvement. Should you have mobility problems, please notify the lecture and lab instructor so that they may seek assistance for you in the case of fire drills or emergencies.

Also, if you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance.

**Academic Advising**
As soon as students are ready to declare a major, they should meet with an Academic Advisor. The Academic Advisor will guide the student through the requirements of the major, including developing and maintaining the student’s degree plan and directing the student to an appropriate Faculty Mentor. Specific requirements to complete degrees differ from college to college (including signatures needed, timetables to follow, examinations to take, etc.), so each student should consult an Academic Advisor in the college that houses his or her chosen major.
General Disclaimer
The Instructor reserves the right to modify the schedules and policies in this syllabus if and when necessary. Such changes will be announced during regular scheduled lecture or laboratory periods but no attempt will be made to contact students who are absent when the announcement is made. Students are responsible for abiding all announced changes, and it is the student’s responsibility to obtain this information.
BIOL-1406.001 (Biology I) FALL 2012  
MW 2:00-3:15 CI 113

Course Outline

<table>
<thead>
<tr>
<th>WEEK</th>
<th>DAY</th>
<th>DATE</th>
<th>TOPIC</th>
<th>CHAPTER</th>
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<tr>
<td>1</td>
<td>W</td>
<td>08/22</td>
<td>Introduction</td>
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<td>2</td>
<td>M</td>
<td>08/27</td>
<td>Scientific method</td>
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<td>W</td>
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<td>Water and fitness of the environment</td>
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<td>3</td>
<td>M</td>
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<td>Water and fitness of the environment (cont’d)</td>
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<td>4</td>
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<td>Structure and function of the macromolecules</td>
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<td>A tour of the cell</td>
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<td>Meiosis and the sexual life cycles</td>
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<td>11/28</td>
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<td>M</td>
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<td>DNA technology and genomics</td>
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Final exam: Monday, December 10, 2012, 1:45-4:15 pm