UTRGV COURSE SYLLABUS

General Biology 1406  
FALL 2017  
Instructor: Dr. Lucia B. Carreon Martinez  
Telephone: ext. 5197

Email: lucia.carreonmartinez@utrgv.edu  
Class Schedule: 1406-12 T-Th 8:00-9:15 AM  
Office location & hours: BEOB #131

1406-14 T-Th 10:40 AM-12:00 PM  
M 1:30-3:45pm  
T: 1:15-2:15  
Th: 1:30 -3:30pm

**Textbook and/or Resource Material:**

NOTE: In regards to textbook, any textbook or Campbell 9th-11th edition can be useful for this course. **HOWEVER, MASTERING BIOLOGY ACCESS CARD HAS TO BE 10TH EDITION ONLY.** You can buy it through blackboard once the course starts.

Reading a textbook is strongly encouraged and recommended.

**Required:** Mastering Biology access card code 10th Edition


**OR:** OpenStax, Concepts of Biology, Rice University. Download for free at: http://cnx.org/content/col11487/latest/

**Course Description and Prerequisites**

A study of the basic principles of Biology. Topics will include biological chemistry, cell structure and function, photosynthesis and respiration, DNA structure and function, mitosis, meiosis, Mendelian genetics, evolution, and the structure and function of bacteria, viruses, protozoan, algae, fungi, and plants

**Learning Objectives/Outcomes for the Course**

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.

**Learning Objectives for Core Curriculum Requirements**

Satisfies one course of the core curriculum requirement in Life and Physical Sciences  

**Co-requisite: BIOL 1406 Lab - Biology Laboratory 1**

Recommended prerequisite: MATH 1314 Successful completion of College Algebra or concurrent enrollment in higher level mathematics is recommended. Recommended

**Grading Policies**

Your LECTURE ONLY final grade will be determined by **four (4) exams 60% (15% each, out of 5 exams), Mastering Biology Homework (20%), class quiz/activities handouts (15%), group work activity**
Final grades calculations ARE FINAL, **there is no rounding up**, please do not request it.

The final grade is composed of: 75% Lecture grade and 25% Laboratory grade.

If you missed one examination you can make it up by taking a cumulative final exam, or if you want to improve your grade (the final exam would replace the lowest grade of the previous exams).

**Attendance:** If you didn’t attend one class, you will not be able to hand in the quiz/class activity of the topic covered that day.

**Cell phone use is not allowed during lecture time or exams**- in case of an emergency you need to notify the instructor BEFORE class. Cell phone use (except emergencies) **and will be penalized with - 5pts less on exams.**

**NOTE:** If you decide to take Final Exam, it will be taken into account by replacing the lowest of the previous grades.

UTRGV’s grading policy is to use straight letter grades (A, B, C, D, or F).

**Other Course Information**

**ATTENDANCE:**
- Students are required to attend all classes, **and must be on time** for pre-lecture quizzes and/or exams. Excessive absences will result in a loss of points from participation grade. **I am required to report excessive absences (more than three) to the ALERT program.**

**Exams & Make-up Exam**
- No make-up exams or activities will be given. In class discussion **CANNOT be made up**
- You will be assigned a zero (0) for all missed exams or discussions. If you know you are to miss an exam, inform the professor as soon as possible and before the exam.
- **Students will not be allowed to start an exam once the first exam has been turned in.**
- During examinations your tabletop must be devoid of books, notes, calculators, cell phones, etc.
- **Cell phones/earphones/i-pods/Laptops/etc, and text messaging are not allowed during class time or exams.** Phones must be off and stored in a bag and off the table and off your pockets. Five points will be deducted from your final grade if you use any of these electronic devices. Let you know your instructor, at the beginning of class, if you need the cell phone (on vibrate) during lab exercise, and if you take a call during class, go outside to talk. Do not ever talk on the phone in class.
- **For exams and final exam YOU MUST BRING A SCANTRON (Form No. 882-E ONLY).**
- **YOU are responsible of providing pencils, pen and eraser. Exams must be returned with the SCANTRON at the end of the exam.**
- **Students are not allowed to leave the class (no restroom visits) during exams and quizzes.** If you leave the class during an exam, you will lose the opportunity to complete the exam. **If emergency make sure you bring a doctor’s note and talk to instructor before the exam.**
- **Cell phones and other electronic devices are not allowed during exams.** All devices must be turned off and put away prior to the exam. If there is an emergency situation that requires flexibility in this policy, you must get approval from the instructor **prior to the start of the exam.**
- **Absences:** If I am given a notification within 24 hours of your absence, and a valid medical excuse is provided, I will justify your absence, **but your discussion points will not be taken into account.**
- **Issues concerning examinations (revisions) and grading will be addressed for one week after each exam is given, but not latter.**
### FALL 2017 Tentative Course Calendar*

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Chapter</th>
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<tbody>
<tr>
<td>Aug 31st</td>
<td>Themes in the study of life</td>
<td>1</td>
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<tr>
<td>Sept 5th</td>
<td>The Chemical context of life</td>
<td>2</td>
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<td></td>
<td>Water and life</td>
<td>3</td>
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<tr>
<td>Sept 7th</td>
<td>Carbon and Molecular Diversity of life</td>
<td>4</td>
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<tr>
<td>Sept 12th</td>
<td>Exam I*</td>
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<tr>
<td>Sept 14th</td>
<td>The structure and function of large biological molecules</td>
<td>5</td>
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<td>Sept 19</td>
<td>A tour of the cell</td>
<td>6</td>
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<tr>
<td>Sept 21</td>
<td>Membrane Structure and Function</td>
<td>7</td>
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<tr>
<td>Sept 26</td>
<td>An introduction to Metabolism</td>
<td>8</td>
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<tr>
<td>Sept 28</td>
<td>Cellular respiration and fermentation <em>(group work activity)</em></td>
<td>9</td>
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<tr>
<td>Oct 3rd</td>
<td>Exam II*</td>
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<tr>
<td>Oct 5th</td>
<td>Photosynthesis <em>(group work activity)</em></td>
<td>10</td>
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<td>Oct 10</td>
<td>The Cell cycle</td>
<td>12</td>
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<td>Oct 12</td>
<td>Meiosis and sexual life cycles</td>
<td>13</td>
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<td>Oct 17th</td>
<td>Mendel and the gene idea</td>
<td>14</td>
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<td>Oct 24th</td>
<td>Exam III*</td>
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<td>Oct 19th</td>
<td>The chromosomal basis of inheritance</td>
<td>15</td>
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<tr>
<td>Oct 26</td>
<td>The molecular basis of inheritance</td>
<td>16</td>
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<td>Oct 31</td>
<td>From gene to protein</td>
<td>17</td>
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<td>Nov 2nd</td>
<td>Regulation of gene expression</td>
<td>18</td>
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<td>Nov 7th</td>
<td>Exam IV*</td>
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<td>Nov 9th</td>
<td>Viruses and Biotechnology</td>
<td>19</td>
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<tr>
<td>Nov 14</td>
<td>Descent with Modification: A Darwinian view of life</td>
<td>22</td>
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<td>Nov 16</td>
<td>The evolution of populations</td>
<td>23</td>
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<tr>
<td>Nov 21st</td>
<td>The Origin of species</td>
<td>24</td>
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<tr>
<td>23-28</td>
<td>Catch up lecture</td>
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<tr>
<td>Nov 30th</td>
<td>Catch up lecture</td>
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<tr>
<td>Dec 5th</td>
<td>Exam V*</td>
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<tr>
<td>Dec 12th</td>
<td>Lecture classroom FINAL EXAM CUMULATIVE</td>
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* Exact Dates of subjects covered and all exams (except the final exam) are tentative and may change as needed to coincide with progress in course.

**IMPORTANT:**
Each student must complete and submit their own work at all times. Failure to follow instructions on any assignment, participation, quiz or exam will result in a grade of zero (0).

The contents of this syllabus are subject to change. Any changes incorporated will be announced to you in class or Blackboard. Therefore, it is very important you attend all classes and check Blackboard Announcements regularly.

**Important dates**
The UTRGV academic calendar can be found at http://my.utrgv.edu at the bottom of the screen, prior to login.
Important dates for FALL 2017 include:
Sept. 1 (Fri.) Last day to withdraw (drop all classes) and receive an 80% refund
Sept. 4 (Mon.) Labor Day Holiday. No classes.
Nov. 23 – Nov. 25 (Thurs. – Sat.) Thanksgiving Holiday. No classes.
Dec. 7 (Thurs.) Study Day. No classes.
Dec. 8 – Dec. 14 (Fri. – Thurs.) Final Exams

UTRGV Policy Statements

STUDENTS WITH DISABILITIES: Required on all syllabi. Do not modify.
If you have a documented disability (physical, psychological, learning, or other disability which affects your academic performance) and would like to receive academic accommodations, please inform your instructor and contact Student Accessibility Services to schedule an appointment to initiate services. It is recommended that you schedule an appointment with Student Accessibility Services before classes start. However, accommodations can be provided at any time. Brownsville Campus: Student Accessibility Services is located in Cortez Hall Room 129 and can be contacted by phone at (956) 882-7374 (Voice) or via email at accessibility@utrgv.edu. Edinburg Campus: Student Accessibility Services is located in 108 University Center and can be contacted by phone at (956) 665-7005 (Voice), (956) 665-3840 (Fax), or via email at accessibility@utrgv.edu.

MANDATORY COURSE EVALUATION PERIOD: Required on all syllabi. Do not modify.
Students are required to complete an ONLINE evaluation of this course, accessed through your UTRGV account (http://my.utrgv.edu); you will be contacted through email with further instructions. Students who complete their evaluations will have priority access to their grades.

ATTENDANCE
Students are expected to attend all scheduled classes and may be dropped from the course for excessive absences. UTRGV’s attendance policy excuses students from attending class if they are participating in officially sponsored university activities, such as athletics; for observance of religious holy days; or for military service. Students should contact the instructor in advance of the excused absence and arrange to make up missed work or examinations.

SCHOLASTIC INTEGRITY:
As members of a community dedicated to Honesty, Integrity and Respect, students are reminded that those who engage in scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and expulsion from the University. Scholastic dishonesty includes but is not limited to: cheating, plagiarism, and collusion; submission for credit of any work or materials that are attributable in whole or in part to another person; taking an examination for another person; any act designed to give unfair advantage to a student; or the attempt to commit such acts. Since scholastic dishonesty harms the individual, all students and the integrity of the University, policies on scholastic dishonesty will be strictly enforced (Board of Regents Rules and Regulations and UTRGV Academic Integrity Guidelines). All scholastic dishonesty incidents will be reported to the Dean of Students.

SEXUAL HARASSMENT, DISCRIMINATION, and VIOLENCE: Required on all syllabi. Do not modify.
In accordance with UT System regulations, your instructor is a “responsible employee” for reporting purposes under Title IX regulations and so must report any instance, occurring during a student’s time in college, of sexual assault, stalking, dating violence, domestic violence, or sexual harassment about which she/he becomes aware during this course through writing, discussion, or personal disclosure. More information can be found at www.utrgv.edu/equity, including confidential resources available on campus. The faculty and staff of UTRGV actively strive to provide a learning, working, and living environment that promotes personal integrity, civility, and mutual respect in an environment free from sexual misconduct and discrimination.

COURSE DROPS:
According to UTRGV policy, students may drop any class without penalty earning a grade of DR until the official drop date. Following that date, students must be assigned a letter grade and can no longer drop the class. Students considering dropping the class should be aware of the “3-peat rule” and the “6-drop” rule so they can recognize how dropped classes may affect their academic success. The 6-drop rule refers to Texas law that dictates that undergraduate students may not drop more than six courses during their undergraduate career. Courses dropped at other Texas public higher education institutions will count toward the six-course drop limit. The 3-peat rule refers to additional fees charged to students who take the same class for the third time.