INTRODUCTION TO BIOLOGY II 1407  
INSTRUCTOR: DR. LUCIA B. CARREON MARTINEZ

SEMESTER/YEAR: SP 2017  
PHONE/ E-MAIL: lucia.carreonmartinez@utrgv.edu ext. 5197

LOCATION: Sabal Hall 1.106  
OFFICE: BEOBL (East office bldg. #28) room 131

TIME: 10:50-12:05  
OFFICE HOURS: TBA

TEXTS

OR Campbell Biology Loose leaf textbook ISBN: 9780133922851

COURSE DESCRIPTION

A study of the basic principles of Biology. Topics include the diversity and classification of life will be studied, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals.

Recommended/co-requisite: BIOL 1107

BIOLGY FOR SCIENCE MAJORS II LABORATORY

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

Note: It is recommended that BIOL 1406 Biology for Science Majors I (Lecture and Laboratory) be taken before BIOL 1407/1107.

COURSE LEARNING OBJECTIVES

LEARNING OUTCOMES

Upon successful completion of this course, students will:
1. Describe modern evolutionary synthesis, natural selection, population genetics, micro and macroevolution, and speciation.
2. Describe phylogenetic relationships and classification schemes.
3. Identify the major phyla of life with an emphasis on plants and animals, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.
4. Describe basic animal physiology and homeostasis as maintained by organ systems.
5. Compare different sexual and asexual life cycles noting their adaptive advantages.
6. Illustrate the relationship between major geologic change, extinctions, and evolutionary trends.

THECB ACGM LEARNING OBJECTIVES

The diversity and classification of life will be studied, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. Laboratory activities will reinforce study of the diversity and classification of life, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. Upon successful completion of this course, students will:

LECTURE:
1. Describe modern evolutionary synthesis, natural selection, population genetics, micro and macroevolution, and speciation.
2. Describe phylogenetic relationships and classification schemes.
3. Identify the major phyla of life with an emphasis on plants and animals, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.
4. Describe basic animal physiology and homeostasis as maintained by organ systems.
5. Compare different sexual and asexual life cycles noting their adaptive advantages.
6. Illustrate the relationship between major geologic change, extinctions, and evolutionary trends.

**Department SLOs for 1407**

1. Diversity of Life: The Biology graduate is aware of the diversity of life and interrelationships between an organism and its environment.
2. Structure and Function: The Biology graduate understands how the organization of a specific structure within an organism is related to a specific function, understands interrelationships among organs and organ systems within an organism, and how interaction between structure and function contribute to the survival of the organism.
3. Scientific Method: The Biology graduate can formulate a testable hypothesis, evaluate and design experiments, analyze and interpret data, and communicate research findings in both oral and written form.

**Grading Policies**

Your final grade will be determined by **5 exams 60%** (15% each, **only four exams will count**)  
Homework assignments in Mastering Biology (20%),  
Quizzes 10% in Mastering Biology  
Group work activity 12%.

**Missed examinations cannot be made up.**  
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).

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).

**Important dates**

- Jan. 16 (Mon.) Martin Luther King Jr. Holiday. No classes.
- Jan. 17 (Tues.) Spring classes begin. Official First Class Day.
- Feb. 1 (Wed.) Census Date (Last day to drop without it appearing on the transcript)
- Mar. 13 – Mar. 18 (Mon. – Sat.) Spring Break. No classes.
- April 13 (Thurs.) Last day to drop a class (grade of DR) or withdraw (grade of W)
- April 14 – April 15 (Fri. – Sat.) Easter Holiday. No classes.
- May 4 (Thurs.) Study Day. No classes.
- May 5 – 11 (Fri. – Thurs.) Final Exams
Class Policies

ATTENDANCE:
- Students are required to attend all classes, and must be on time for 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 quizzes will be given. Quizzes: Clicker’s quizzes CANNOT be made up
- You will be assigned a zero (0) for all missed exams or quizzes. 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.
- For exams and final exam YOU MUST BRING A SCANTRON (Form No. 882-E). 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 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.
- Cell phones and other electronic devices are not allowed during exams OR DURING LECTURE. 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 quiz will not be taken into account.
- Issues concerning examinations and grading will be addressed for one week after each exam is given, but not later.
- Cell phones are not allowed for phone calls, in case of an emergency you need to notify the instructor before the class starts that you are waiting for a call, AND if you take a call during class, go outside to talk. Do not ever talk on the phone in class.

NOTE: “This syllabus is subject to change”. Any changes incorporated will be given to you in the lab class as soon as possible. Therefore, it is very important you attend all classes.
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Chapter</th>
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<tbody>
<tr>
<td>January 19</td>
<td>The History of Life on Earth</td>
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<td>January 24</td>
<td>Phylogeny and the Tree of Life</td>
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<td>January 26</td>
<td>Bacteria and Archae</td>
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<td>January 31</td>
<td>Protists</td>
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<td>February 2nd</td>
<td>Fungi</td>
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<td>February 7th</td>
<td>Exam 1</td>
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<td>February 9</td>
<td>Plant Diversity I</td>
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<td>February 14</td>
<td>Plant Diversity II</td>
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<td>February 16</td>
<td>Plant Structure, Growth and Development</td>
<td>35 (1-4)</td>
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<td>February 21</td>
<td>Resource Acquisition and Transport in vascular plants</td>
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<td>February 23</td>
<td>Angiosperm reproduction and Biotechnology</td>
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<td>February 28</td>
<td>Exam II*</td>
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<td>March 2</td>
<td>An Overview of Animal Diversity</td>
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<td>March 7</td>
<td>Group work (10 min presentations)</td>
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<td>March 9</td>
<td>Group work (10 min presentations)</td>
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<td>March 14-16</td>
<td>Spring Break</td>
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<td>March 21</td>
<td>Group work (10 min presentations)</td>
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<tr>
<td>March 23</td>
<td>Basic Principles of Animal Form and Function</td>
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<td>March 28</td>
<td>Exam III</td>
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<td>March 30</td>
<td>Animal Nutrition</td>
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<td>April 4th</td>
<td>Circulation and gas exchange</td>
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<td>April 6</td>
<td>Animal Reproduction</td>
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<td>April 11</td>
<td>Exam IV*</td>
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<td>April 13</td>
<td>Neurons, synapses and signaling</td>
<td>48</td>
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<tr>
<td>April 18</td>
<td>Nervous systems</td>
<td>49 (1)</td>
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<td>April 20</td>
<td>Ecology</td>
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<td>April 25</td>
<td>Population Ecology</td>
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<td>April 27</td>
<td>Community Ecology</td>
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<td>May 2</td>
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<td>May 4th</td>
<td>Study day</td>
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<td>May 9th</td>
<td>FINAL EXAM 10:15- 12:00 PM</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.
Students with Disabilities
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
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. Online evaluations will be available April 13th – May 4th, 2017. 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
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.