COURSE TITLE: General Biology II

INSTRUCTOR: Maria Segovia
PHONE: (972) 600-5323
E-MAIL: mmsegovia@irvingisd.net

OFFICE: 323
HOURS: M-F 3:15-4:15pm

MEETING DAY, TIME, & LOCATION
Section: 73295
Lecture: MWF or TR 9:45 – 11:20
Lab: TR or MWF 9:45 – 11:20

TEXTBOOK: Reece et al., Campbell Biology, 10th ed.

COURSE PREREQUISITE
BIOL 1406 with a grade of "C" or better within the last three years or satisfactory score on the Biology CLEP exam. Students must be college level ready in Reading and Writing.

COURSE DESCRIPTION
An introductory survey of current biological concepts for students majoring in the sciences. 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 the study of these concepts. (3 Lec., 3 Lab.)

CREDIT HOURS: 4

TEXAS CORE CURRICULUM
http://www.thecb.state.tx.us/index.cfm?objectid=6F049CAE-F54E-26E4-ED9F0DAC62FABF7D
- Critical Thinking Skills - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
- Communication Skills - to include effective development, interpretation and expression of ideas through written, oral and visual communication
- Empirical and Quantitative Skills - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
- Teamwork - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
"The following Student Learning Outcomes with their associated assessment criteria are not meant to be all inclusive, and are meant to be used along with all other course learning outcomes and assessment devices, listed under Course Objectives, in the determination of the student's final course grade. Completion of the specific Student Learning Outcomes listed below, at any assessment grading level, does NOT and will NOT guarantee the student that final course grade at the end of the semester!"

**STUDENT LEARNING OUTCOMES (SLOs)**

**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.

**LAB:**
1. Apply scientific reasoning to investigate questions, and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.
2. Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.
3. Communicate effectively the results of scientific investigations.
4. Demonstrate knowledge of modern evolutionary synthesis, natural selection, population genetics, micro and macroevolution, and speciation.
5. Distinguish between phylogenetic relationships and classification schemes.
6. 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.
7. Describe basic animal physiology and homeostasis as maintained by organ systems.
8. Compare different sexual and asexual life cycles noting their adaptive advantages.
9. Illustrate the relationship between major geologic change, extinctions, and evolutionary trends

**ACCESSING eCAMPUS**

You will be using eCampus, an online course site, in this class. Go to [http://ecampus.dcccd.edu/](http://ecampus.dcccd.edu/) to log in to your account. If you cannot access the site, please contact technical support at 1-866-374-7169. If this course is not available in your course list, please contact your instructor.
COURSE OUTLINE
➢ Lecture presents the fundamental theory of Ecology and Evolution. Additional topics include Bacteria & Archaea, Protists, Plant Diversity, Fungi, Animal Diversity and Plant and Animal Structures. Lecture Exams will be given per the Course Schedule.
➢ Laboratory elaborates upon the theories presented in lecture through the use of "hands on" learning experiences and may incorporate material not discussed in the lecture portion. Lab exams will be given per the Course Schedule.

EVALUATION PROCESS

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
<th>Points</th>
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<tbody>
<tr>
<td>Lecture Exams</td>
<td>60%</td>
<td>400</td>
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<tr>
<td>@ 100 points ea.</td>
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<tr>
<td>Semester Project</td>
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<td>+100</td>
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<tr>
<td>Comprehensive Final</td>
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<td>+200</td>
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<tr>
<td>Lecture Total</td>
<td></td>
<td>700</td>
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<tr>
<td>Lab Practicals</td>
<td>40%</td>
<td>200</td>
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<tr>
<td>@ 100 points ea.</td>
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<tr>
<td>5 quizzes at 20 points each</td>
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<td>+100</td>
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<tr>
<td>Lab Total</td>
<td></td>
<td>300</td>
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<tr>
<td>Course Total points</td>
<td></td>
<td>1000</td>
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GRADE SCALE
The following letter grades will be assigned per the total points listed:
A (90-100%)=900-1000, B (80-89%)=800-899, C (70-79%)=700-799, D (60-69%)=600-699, F (0-59%)=0-599

CLASS RULES
➢ Any student who engages in distracting practices – which includes, but is not limited to, cell phone use, excessive talking, or sleeping – will be asked to leave for the remainder of the class. Dismissal due to distracting others will result in an absence for that day.
➢ For each class day, attendance is lecture is required to attend lab.
➢ Online assignments and quizzes should be completed using Mozilla Firefox, Goggle Chrome, or Internet Explorer on a computer. Using a device such as a phone or tablet is not recommended.
➢ Students more than 30 minutes late for a lecture exam will not be allowed to take the exam.
➢ Make-up exams will not be given for any reason. The first exam missed will count as the drop exam and subsequent exams missed will be given grades of zero (0%).
➢ Closed-toe shoes must be worn in every lab. Goggles/gloves will be provided and must be worn when using eye and skin irritants.
➢ Missed lab activities, lab quizzes, and lab projects cannot be made up due to time constraints.
➢ When emailing your instructor, clearly state your name, the class and section you are in, and your issue.
➢ No “extra credit” can substitute for missed classes, exams, or poor performance.

DROP DATE
The last day to drop for this semester and receive at grade of “W” is April 17, 2019 by 7pm in the Registrar’s Office (A130). Under Texas law, students who enroll in a Texas public institution of higher education (including DCCCD) for the first time in fall 2007 or later may not drop more than six courses during their entire undergraduate career. For more information:
https://www1.dcccd.edu/catalog/ss/oep/dw.cfm

ATTENDANCE
Attendance in lecture and laboratory sections of this course is mandatory. Tardiness in either class can result in the loss of points. Students must bring notes from any online presentations to lecture or they will not be allowed to stay. Also, students must attend lecture in order to attend lab. Students are expected to arrive on time and stay until class is dismissed. If you will be absent, please email your instructor to let them know, but be aware you may not make up any missed Lecture Exam or Lab Practical for any reason. One Lecture Exam will be dropped.

ACADEMIC DISHONESTY
Academic dishonesty will not be tolerated in this course. If cheating is observed, points for that activity will be disallowed. Grades of zero given for cheating may not be dropped. Academic dishonesty includes activities such as copying from another student’s lecture exam, lab quiz, lab project, lab report, or collaboration with students who have completed lab practicals, quizzes, and lecture exams. It can be assumed that tests showing the same or similarly missed questions as evidence of dishonesty. All tests involved can receive a score of zero. Also, students missing similar questions when taking the test at or near the same time will be more closely scrutinized. The instructor reserves the right to schedule separate testing times for students.

POLICIES
Disability Accommodations: Any student who may need accommodations due to a disability should contact the Jack E. Singley Office at 972-600-5000.

Religious Holidays Statement: A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence if, not later than the fifteenth day after the first day of the semester, the student notified the instructor of each class scheduled on the date that the student would be absent for a religious holy day. A “religious holy day” means a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20, Tax Code. The notice shall be in writing and shall be delivered by the student personally to the instructor, with receipt acknowledged and dated by the instructor or by certified mail, return receipt requested, addressed to the instructor. A student who is excused under this section may not be penalized for the absence, but the instructor may appropriately respond if the student fails to satisfactorily complete the assignment or examination.

GENERAL INSTITUTIONAL POLICIES

COURSE-RELATED INSTITUTIONAL POLICIES

DISCLAIMER
The provisions contained in this syllabus do not constitute a contract between the student and El Centro College. These provisions may be changed at the discretion of the Coordinator/Instructor. When necessary, appropriate notice of such changes will be given to the student.

The instructor-of-record may provide additional information to enhance the course to meet the needs of the enrolled students, provided that the enhancements do not conflict with the official course syllabus.

Science Learning Center
The Science Learning Center provides student services in the following subjects (majors and non-majors): Biology, Botany, Microbiology, Anatomy and Physiology, Chemistry, Organic Chemistry, Geology, Physics, Nutrition and Ecology. The center is located in P-333, P-334 and P-340; offering various resources all of which are free to the students. The SLC features tutors, software, videos, CDROM’s, internet, models, places to study quietly, places for group work, and other materials to assist in science classes. In order to access resources of the SLC a North Lake College ID Card is required. The subject specific schedule of tutors is updated every semester and is located at the front of the SLC.
When students attend SLC we ask that they sign in and out. These data help us keep the center stocked, running, and most of all, free of charge!

Hours of operation:
Spring/Fall semester: M - R 9 am to 7 pm, F & Sa 9 am – 3 pm
Maymester and Wintermester: M – R 2pm – 6 pm
Summer I & II: M – R 2 pm – 7 pm
Center Phone: 972-273-3273
Coordinator: Amanda Mello

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<thead>
<tr>
<th>WEEK Starting</th>
<th>#</th>
<th>LECTURE SUBJECT / Chapter</th>
<th>LAB SUBJECT</th>
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<tbody>
<tr>
<td>1/14</td>
<td>1</td>
<td>Syllabus and The Evolution of Populations / 23</td>
<td>Lab 0: Safety Review</td>
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<tr>
<td>1/22</td>
<td>2</td>
<td>The Origin of Species / 24</td>
<td>Lab 1: Population Genetics: Hardy-Weinberg Principle</td>
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<td>1/28</td>
<td>3</td>
<td>The History of Life / 25 Phenylogy &amp; The Tree of Life/ 26</td>
<td>Introduce Semester Project</td>
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<td>2/4</td>
<td>4</td>
<td>EXAM 1 Bacteria and Archaea / 27</td>
<td>Bacteria Under the Microscope</td>
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<tr>
<td>2/11</td>
<td>5</td>
<td>Protists / 28</td>
<td>Lab 2: Protists</td>
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<tr>
<td>2/19</td>
<td>6</td>
<td>Protists / 28</td>
<td>Lab 2: Protists</td>
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<tr>
<td>2/25</td>
<td>7</td>
<td>Plant Diversity I / 29</td>
<td>Lab 3: Plant Biodiversity</td>
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<td>3/4</td>
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<td>Plant Diversity II/ 29-30</td>
<td>Lab 4: Plant Biodiversity Con’t</td>
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<td>3/11</td>
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<td>SPRING BREAK</td>
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<tr>
<td>3/19</td>
<td>9</td>
<td>EXAM 3 Fungi / 31</td>
<td>Lab 6: Fungi and Lichens</td>
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<tr>
<td>3/25</td>
<td>10</td>
<td>Overview of Animal Diversity/ 32</td>
<td>LAB PRACTICAL 2</td>
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<tr>
<td>4/1</td>
<td>11</td>
<td>Invertebrates/ 33</td>
<td>Lab 5: Animal Biodiversity: A Multi-Layer Approach</td>
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<tr>
<td>Date</td>
<td>Time</td>
<td>Subject and Activity</td>
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<td>4/22</td>
<td>14</td>
<td>Population and Community Ecology / LAB PRACTICAL 3 53/54</td>
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<td>4/29</td>
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<td><strong>EXAM 5</strong> Lab 6 – Comparative Anatomy</td>
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<td>5/6</td>
<td>16</td>
<td>Present Semester Projects</td>
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<td>5/13</td>
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<td><strong>FINAL 5/15</strong></td>
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**IMPORTANT NOTE**

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