COURSE TITLE: Biology for Non-Science Majors I  COURSE NUMBER: BIOL 1408

COURSE PREREQUISITE:
College level ready in Reading and Writing.

COURSE DESCRIPTION
Presentation of biological concepts for the non-science major. Provides a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. Laboratory activities will reinforce 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, 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

STUDENT LEARNING OUTCOMES (SLOs)
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. Distinguish between prokaryotic, eukaryotic, plant and animal cells, and identify major cell structures.
5. Identify stages of the cell cycle, mitosis (plant and animal), and meiosis.
6. Interpret results from cell physiology experiments involving movement across membranes, enzymes, photosynthesis, and cellular respiration.
7. Apply genetic principles to predict the outcome of genetic crosses and statistically analyze results.
8. Identify the importance of karyotypes, pedigrees, and biotechnology.
9. Identify parts of a DNA molecule, and describe replication, transcription, and translation.
10. Analyze evidence for evolution and natural selection.

REQUIRED MATERIALS
➢ Concepts of Biology by OpenStax College, available through
   o http://openstaxcollege.org/textbooks/concepts-of-biology
   o Campus Bookstore or OpenStax website for the printed textbook (ISBN 978-1-938168-11-6)
➢ Laboratory Exercises available on eCampus
➢ Packet of Scantron 882 answer sheets

A student of El Centro College is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer. THECB TAC Rule 4.218 (c)

COURSE OUTLINE
➢ Lecture presents the fundamental theory of biological topics. Five units will be covered and assessed:
   • Weeks 1-4: Molecules of Life
   • Weeks 5-6: Cell Structure
   • Weeks 7-9: Cell Energetics
   • Weeks 10-11: DNA & Cell Reproduction
   • Weeks 12-14: Inheritance & Expression of Genes
➢ 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.
EVALUATION PROCESS

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<thead>
<tr>
<th>Item</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>5 Exams</td>
<td>50%</td>
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<tr>
<td>Lab Work and Class Assignments</td>
<td>40%</td>
</tr>
<tr>
<td>Presentation</td>
<td>10%</td>
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<tr>
<td>Total</td>
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GRADE SCALE
The following letter grades will be assigned per the total points listed:
A (90-100%) = 810-900, B (80-89%) = 720-809, C (70-79%) = 630-719, D (60-69%) = 540-629, F (0-59%) = 0-539

LATE WORK: Labs, assignments, and homework can be turned in ONE class period late and will be graded at 50% of the original grade. Work turned on any other date will or via email will not be accepted without prior arrangements. Late work without the proper form attached will also not be accepted. Attendance grades cannot be made up or turned in late.

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://www.elcentrocollege.edu/apply-reg/reg/pages/dropwithdraw.aspx](https://www.elcentrocollege.edu/apply-reg/reg/pages/dropwithdraw.aspx)

ATTENDANCE
Attendance is lecture and lab is mandatory. Students are expected to arrive on time and stay until class is dismissed.

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 time. In lab, dismissal due to distracting others will result in a quiz grade of zero (0%) for that day.
- Students leaving early from lab will receive a deduction from their quiz grade for that day.
- Failure to clean all workstations will result in a quiz grade of zero (0%) for the entire class.
- 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%).
- Missed labs, lab quizzes, and practicals cannot be made up due to time constraints.
- Closed-toe shoes must be worn in every lab. Goggles/gloves will be provided and must be worn when using eye and skin irritants.
- No “extra credit” can substitute for missed classes, exams, or poor performance.

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 practical, lab report, or collaboration with students who have completed lab practicals, lecture 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.

ACCESSING eCAMPUS
You will be using eCampus, an online course site, in the class. Go to [http://ecampus.dcccd.edu/](http://ecampus.dcccd.edu/) to log into your account. If this course is not available in your course list, please contact your instructor.

INSTITUTIONAL POLICIES
All El Centro students are responsible for knowing and adhering to the following institutional and course-related policies:
- Institutional Policies
- Course-related Institutional Policies
- Title IX and Sexual Misconduct
- Concealed Carry (Campus Carry)
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.