Course Syllabus

BIOL 1408
Biology for Non-Science Majors I (2601015103)

Course Description: Provides a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. Laboratory activities will reinforce a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction.

Semester Hours Credit: 4

Lecture/Lab Hours: 3-3

Prerequisite: To enroll in any science course, students must demonstrate readiness to perform college level academic coursework in reading and writing according to Coastal Bend College academic skills assessment guidelines. Basic computer skills are also required.

Textbook(s): 
LECTURE – Biology with Connect Plus
ISBN: 9781308502045

LABORATORY – Applied Principles of Biology (1st Edition)
ISBN: 9780982797808

Student Learning Outcomes:

Upon successful completion of this course, students will:

1. Distinguish between prokaryotic, eukaryotic, plant and animal cells, and identify major cell structures.

2. Identify stages of the cell cycle, mitosis (plant and animal), and meiosis.

3. Interpret results from cell physiology experiments involving movement across membranes, enzymes, photosynthesis, and cellular respiration.

4. Apply genetic principles to predict the outcome of genetic crosses and statistically analyze results.

5. Describe karyotyping, pedigrees and biotechnology and provide an example of the uses of each.
6. Identify parts of a DNA molecule, and describe replication, transcription, and translation.

7. Analyze evidence for evolution and natural selection.

8. Apply scientific reasoning to investigate questions, and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.

9. Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.

10. Communicate effectively the results of scientific investigations.

11. Identify the importance of karyotypes, pedigrees, and biotechnology.

**Evaluation Methods:**

The cumulative grade in this course will be a compilation of the lecture grade and the laboratory grade. The lecture grade will be 75% of the overall grade and will be a compilation of exams, quizzes, assignments, participation, and attendance. Exams, quizzes, and assignments will make up 70% of the lecture grade. The laboratory grade will be 25% of the overall grade.

**ADA Statement:** No qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of the College District, or be subjected to discrimination by the College District. Nor shall the College District exclude or otherwise deny equal services, programs, or activities to an individual because of the known disability of an individual with whom the individual is known to have a relationship or association. 42 U.S.C. 12132; 28 CFR 35.130(g).

See at: [GL (Legal)]

**Special Needs Services:** Students with special needs, including physical and learning disabilities, who wish to request accommodations in this course should contact the Student Development Office as soon as possible to make arrangements; this should occur no later than the second week of class or as soon as the student has the documentation on the disability and requested accommodation per a certified medical or psychological professional. In accordance with federal law, a student requesting accommodations must provide documentation of disability to the Student Development Advisor.

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At all times, in all ways, the student is at the heart of all we do.
For more information, contact: in Alice at sdalice@coastalbend.edu; Beeville at sdbeeville@coastalbend.edu; Kingsville at sdkingsville@coastalbend.edu; and Pleasanton at sdpleasanton@coastalbend.edu.

**Academic Dishonesty:** Each student is charged with notice and knowledge of the contents and provisions of Coastal Bend College’s rules and regulations concerning student conduct. All students shall obey the law, show respect for properly constituted authority, and observe correct standards of conduct. Scholastic dishonesty shall constitute a violation of these rules and regulations and is punishable as prescribed by Coastal Bend College Policies FLB (Local) and FM (Local). Scholastic dishonesty shall include, but not be limited to, cheating on a test, plagiarism, and collusion.

See at: **FLB (Local)** and **FM (Local)**.

See the [Student Handbook](#) for further explanation of Scholastic Dishonesty.

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NOTE: The College website (www.coastalbend.edu) serves as the main source with the most current version of the Coastal Bend College Board Policies and the Coastal Bend College Catalog.