

## **Course Syllabus**

## BIOL 1413 General Zoology (2607015103)

**Course Description:** Fundamental biological concepts relevant to animals, including systematics, evolution, structure and function, cellular and molecular metabolism, reproduction, development, diversity, phylogeny, and ecology. Laboratory activities will reinforce fundamental biological concepts relevant to animals.

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** – *Zoology, Miller and Harley (7<sup>th</sup> edition)* **ISBN**: 9780073228075

**LABORATORY** -- General Zoology Laboratory (6<sup>th</sup> edition) **ISBN**: 9780072528374

## **Student Learning Outcomes:**

Upon successful completion of this course, students will:

- 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. Compare and contrast the structures, reproduction, and characteristics of animals.
- 5. Describe the characteristics of life and the basic properties of substances needed for life.

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- 6. Identify the principles of inheritance and solve classical genetic problems.
- 7. Describe phylogenetic relationships and classification schemes.
- 8. Identify the major phyla of life with an emphasis on animals, including the basis for classification, structural and physiological adaptation, evolutionary history, and ecological significance.
- 9. Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins.
- 10. Identify the substrates, products, and important chemical pathways in respiration.
- 11. Describe the unity and diversity of animals and the evidence for evolution through natural selection.
- 12. Describe the reasoning processes applied to scientific investigations and thinking.
- 13. Describe basic animal physiology and homeostasis as maintained by organ systems.
- 14. Describe modern evolutionary synthesis, natural selection, population genetics, micro and macroevolution, and speciation.
- 15. Describe the structure of cell membranes and the movement of molecules across a membrane.

## **Evaluation Methods:**

The cumulative grade in this course will be a compilation of the lecture grade and the laboratory grade. The lecture grade will represent 75% of the overall grade. The laboratory grade will represent 25% of the overall grade. The lecture grade will be a compilation of exams, assignments, participation, and attendance.. Two exams will be given in the laboratory section of the course, a midterm lab practical, and a final lab practical. The laboratory grade will consist of the laboratory worksheet/assignment average (33%), the laboratory midterm exam (33%), and the laboratory final exam grade (33%).

**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.

For more information, contact: in Alice at <a href="mailto:sdalice@coastalbend.edu">sdalice@coastalbend.edu</a>; Beeville at <a href="mailto:sdalice@coastalbend.edu">sdalice@coastalbend.edu</a>; Kingsville at <a href="mailto:sdalice@coastalbend.edu">sdalice@coastalbend.edu</a>; Kingsville at <a href="mailto:sdalice@coastalbend.edu">sdalice@coastalbend.edu</a>; Kingsville at <a href="mailto:sdalice@coastalbend.edu">sdalice@coastalbend.edu</a>; Alice at <a href="m

**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 <u>Student Handbook</u> for further explanation of Scholastic Dishonesty.

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