Biology Academic Research Cooperative

An instructional program designed to integrate on-campus study with practical hands-on work experience in the biological sciences/life sciences. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of living organisms and their systems.

Course Learning Objectives

Upon successful completion of the lecture component of this course, students will be able to:

- 1. Develop skills to use library and online tools to search for existing body of research literature in science.
- 2. Develop a critical thinking to articulate a scientific research question and formulate a testable hypothesis.
- 3. Identify appropriate scientific techniques for the most commonly used protocols in Biological experiments.
- 4. Improve the skills in data collection from the experiments and basic statistical analyses.
- 5. Develop skills to communicate research findings with the scientific communities by presentations and publications.

Required Institutional Learning Core Learning Outcomes (ICLO):

Communication (COM), Critical Thinking (CT), Empirical & Quantitative Reasoning (EQR), Teamwork (TW)

Required Textbooks

Text Book: Relevant peer reviewed research articles.

Evaluation Standards

Literature Review 300 points = 40%

Hypothesis & Proposal writing 200 points = 10%

Research Methods 100 points = 15%

Data analysis 100 points = 10%

Report writing 300 points = 25%

Total Points Available 1000 points = 100%

LETTER GRADE DETERMINAITON:

A = 90 - 100%

B = 80 - 89%

C = 70 - 79%

D = 60 - 69%

F = 0 - 59%

Disabilities

ADA Statement:

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Any student with a documented disability (e.g. learning, psychiatric, vision, hearing, etc.) may contact the Office on the Weatherford College Weatherford Campus to request reasonable accommodations. *Phone*: 817-598-6350 *Office Location*: Office Number 118 in the Student Services Building, upper floor. *Physical Address*: Weatherford College 225 College Park Drive Weatherford, TX.

Academic Integrity

Academic Integrity is fundamental to the educational mission of Weatherford College, and the College expects its students to maintain high standards of personal and scholarly conduct. Academic dishonesty of any kind will not be tolerated. Academic dishonesty includes, but is not limited to, cheating on an examination or other academic work, plagiarism, collusion, and the abuse of resource materials including unauthorized use of Generative AI. Departments may adopt discipline specific guidelines on Generative AI usage approved by the instructional dean. Any student who is demonstrated to have engaged in any of these activities will be subject to immediate disciplinary action in accordance with institutional procedures.

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