Instructional Design Project: Unit 3

Kermit Riehle

EDTL 7100

5-E Learning Cycle Model for Animal Science

|  |  |
| --- | --- |
| Theme-*Nutrition: Reproduction Application* |  |
| Science Standards: Agricultural Course of Study  Animal Husbandry: grades 9-10  Animal Nutrition: grades 9-10  Animal Reproduction: grades 9-10 | Objectives:   * The students will be able to describe the parts of the reproductive system of male and female livestock and the process involved in producing offspring. * The students will be able to list the traits of economic importance of dairy cattle and the impact proper nutrition has on reproduction * The student will be able to describe an example of the effects on livestock of genetics and breeding |
| Time Requirements: 3 days  *Technology* needed or supplement handouts  Building block examples to pass in class(actual energy, protein, and fiber examples), textbooks | Concepts/Skills:   * Identification of male and female cells * Realize age of sexual maturity * Identify mating systems as related to sexual maturity |
| **ENGAGING** THE STUDENTS | Day 1: Ask – So who do YOU look like? Mom or Dad? What causes these similarities in offspring?   * Why is it important that we learn reproductive concepts in cattle? * What impacts successful offspring production? * How do traits impact our decision of what cows to breed to each other? |
| **EXPLORING** WITH STUDENTS | Day 1: Discuss Natural breeding vs. Artificial Insemination. Present concepts, facts, and information for the students as related to nutrition |
| **EXPLANATION** OF CONCEPTS | Day 1: View video series of artificial insemination in cattle |
| **ELABORATING** TO EXTEND STUDENT LEARNING | Day 2: Bring in actual female reproduction tract from area butcher shop. Show students internal parts and the process of artificial insemination |
| **EVALUATING** STUDENT LEARNING | Day 3: Review and administer Cattle Reproduction Quiz |