

Exploring Animals Using Experience – Based Activities Teaching Elementary Science Using Concrete Materials To Explore Abstract Concepts

EDUO 9525 1-3 units Semester Credit(s)/Unit(s)

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You must be currently teaching students to successfully complete this course.

Note: This is a Public syllabus of the course. For a full detailed syllabus please email the instructor.

Public Syllabus

Course Overview

This course emphasizes student interaction with concrete materials, encouraging hands-on exploration of concepts, constructing meaning and understanding. The students will be behaving as scientists: Exploring, comparing, observing, identifying, recording data, etc. (Care needs to be taken for animals brought into the classroom for observation.) Students will be engaged in field and classroom observations, model building, and art projects that reinforce the concepts.

Course Objectives:

The teacher will:

- 1. Collect materials needed for interactive activities (observations, model building, and art projects).
- 2. Provide opportunities for students to engage in concrete, hands-on explorations.
- 3. Ask interactive questions that engage students in the higher level thinking skills.
- 4. Lead an open-ended brainstorming session.

Course Relation to CCS or other Professional Standards

This course aligns to the standards for: *Next Generation Science Standards for California Public Schools, Kindergarten through Grade Twelve:*

Grade One

LS1.A: Structure and Function: Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, and take in food, water, and air.

Grade Two

LS4.D: Biodiversity and Humans: There are many different kinds of living things in any area, and they exist in different places on land and in water.

Grade Three

LS4.C: Adaptation: For any particular environment, some kinds of organisms survive well, some survive less well, and some cannot survive at all.

Grade Four

LS1.A: Structure and Function: Plants and animals have both internal and external structures that serve various functions in growth, survival, behavior, and reproduction.

Grade Five

LS2.A: Interdependent Relationships in Ecosystems: Organisms are related in food webs in which some animals eat plants for food and other animals eat the animals that eat plants.

Course Assignments

B1 Staff Training Component: Questioning Techniques

Read the two illustrated summaries of Bloom's Taxonomy and Muskingum's learning strategy for questioning and fill in the two charts, *Levels of Difficulty in Thinking Skills*, and *Identifying Leveled Questions*.

B2 Applications: Student Activities

Students will be involved in two brainstorming activities: Writing descriptive questions in response to the newspaper article, *A New Animal is Discovered*, and constructing a "generic" word-web that can be used to organize research data. Using the results of the brainstorming students will write a descriptive paragraph, and also a research report on a specific animal. Write a one page reflection on your experiences in teaching these brainstorming and writing lessons.

B3 Student Explorations with Extensions

There are eight major activities and seventeen extensions for teaching concepts related to zoology. There are more major activities and extensions provided than are needed to meet the requirements for this course. You will need to choose the extensions that are appropriate for you and your students.

The requirements listed below define what is necessary for earning one, two, or three credits/units.

Major activities246Extensions246	Credits/Units	One	Two	Three
Extensions 2 4 6	Major activities	2	4	6
	Extensions	2	4	6

Write a paragraph for each *major activity* reflecting on your experience in teaching the lesson.

Course Assessment Rubric

Excellent: Meets or exceeds course requirements A to A-	Acceptable: Majority of work meets course requirements B+ to B-	Not Acceptable: Needs considerable improvement Unacceptable/Resubmit
Staff training charts B1a and B1b completed accurately and neatly.	Staff training charts B1a and B1b completed with few errors.	Staff training charts B1a and B1b incomplete or have numerous errors.
B2a Brainstorming bulletin board completed with an abundance of posted questions.	B2a Brainstorming bulletin board completed with a minimal number of posted questions.	B2a Brainstorming bulletin board incomplete, and/or has irrelevant questions posted.
B2b and B2c Research writing projects show diligent student participation.	B2b and B2c Research writing projects show minimal research effort by the students.	B2b and B2c Research writing projects did not follow research criteria and also contains incorrect data.
All B3 student explorations and activities completed with photo- documentation of student participation and examples of their work.	All B3 student explorations and activities completed. Partial photo- documentation of student work.	B3 student activities missing. No photo-documentation of student work.
Complete heading at the top of each completed assignment.	Incomplete or incorrect headings at the top of several assignments.	Missing headings at the top of assignments.
All completed assignments organized following the order of the checklist, with the completed checklist at the top of the submission.	Poor organization of completed assignments. Checklist not placed at the top of the submission.	Unorganized submission- did not follow directions. No checklist included.
Clear, relevant, detailed, and thoughtful reflections.	Relevant reflections, but lacking in detail and insight.	Missing reflections, or reflections are irrelevant.
Submission is free of spelling and grammatical errors.	Submission has several spelling and/or grammatical errors.	Submission has numerous spelling and grammatical errors.

• You are allowed 9 months to complete the course.

• For questions involving your registration please contact us at support@dominicanCAonline.com or call (800) 626-5080. To change your address, link to your Dominican Store account at

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