

ARIZONA CTE CAREER PREPARATION STANDARDS & MEASUREMENT CRITERIA

ANIMAL SYSTEMS, 01.0100.4	
STANDARD 1.0—APPLY KNOWLEDGE OF ANATOMY AND PHYSIOLOGY TO PRODUCE AND/OR MANAGE ANIMALS IN A DOMESTICATED OR NATURAL ENVIRONMENT	
1.1	Describe functional differences in animal structures and body systems
1.2	Classify animals according to anatomy and physiology
1.3	Identify selected animal parts from a diagram or on a real animal
1.4	Identify ways that an animal's health can be affected by anatomy/physiology problems
1.5	Perform simple procedures in evaluating an animal's health status
1.6	Identify symptoms of diseases, illnesses, parasites, and other health-related problems
1.7	Diagnose animal ailments
1.8	Implement disease prevention and health improvement program
1.9	Identify and implement (i.e., treat) treatment options
STANDARD 2.0—RECOGNIZE ANIMAL BEHAVIOR TO FACILITATE WORKING WITH ANIMALS SAFELY	
2.1	Explain factors which serve to stimulate or discourage given types of animal behavior
2.2	Recognize the normality curve of animal behavior
2.3	Perform safe handling procedures when working with animals
2.4	Identify strengths and weaknesses of an animal safety handling plan
2.5	Operate animal facilities to insure safety of animals
STANDARD 3.0—PROVIDE PROPER NUTRITION TO MAINTAIN ANIMAL PERFORMANCE	
3.1	Recognize the different phases of an animal's life cycle
3.2	Select diets that provide the appropriate quantity of nutrients for each animal development stage
3.3	Identify the differences between good and poor quality feedstuffs
3.4	Create a balanced ration for a given animal
3.5	Use different types of feedstuffs (e.g., roughage, concentrates) to create a feed ration containing the appropriate amounts of required nutrients
3.6	Use different forms of feedstuffs (e.g., pellets, cracked, rolled, ground) to create a diet that meets the needs of a specific animal

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3.7	Investigate prices of different feedstuffs
3.8	Compare the costs of feeding various rations
3.9	Develop a feeding plan that is cost effective
3.10	Identify risks involved with specific investments (i.e. feed trucks, silos, mills, etc.)
STANDARD 4.0—KNOW THE FACTORS THAT INFLUENCE AN ANIMAL’S REPRODUCTIVE CYCLE TO EXPLAIN SPECIES RESPONSE	
4.1	Identify the parts of male and female reproductive tracts on example animals
4.2	Analyze the reproductive cycle of a given animal
4.3	Evaluate animal readiness for breeding
4.4	Discuss the pros and cons of breeding through natural cover and artificial insemination
4.5	Discuss the implications of genetic variation
4.6	Describe techniques of artificial insemination
4.7	Identify reproduction management practices (e.g., male to female ratios, age and weight for breeding, fertility and soundness for breeding, heat synchronization, flushing)
4.8	Describe the procedure for determining an animal’s breeding readiness
4.9	Identify and prevent problems associated with reproduction
4.10	Select animals based on breeding soundness
4.11	Analyze costs of various reproduction programs
4.12	Compare the economical value of each breeding program
4.13	Create a breeding program that is economically efficient
STANDARD 5.0—IDENTIFY ENVIRONMENTAL FACTORS THAT AFFECT AN ANIMAL’S PERFORMANCE	
5.1	Identify good performance for a given animal species
5.2	Identify reasons why some animals perform better than others
5.3	Identify factors that can be manipulated to control a given animal’s performance.
5.4	Generate ways to increase an animal’s performance
5.5	Make appropriate changes in an animal's environment in order to achieve optimal performance
5.6	Use appropriate tools in manipulating animal performance

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5.7	Identify a given species' desirable production numbers (e.g., birth weight, rate of gain, age of maturity, age of sexual maturity)
5.8	Evaluate desired traits (e.g., production) of animals
5.9	Evaluate the role that economics plays in animal production
5.10	Design facilities appropriate for the production of a given species of animal
5.11	Make decisions on using new techniques and methods in the production facility so that both profit and animal safety are maximized