Kansas CTE

Animal Science (2013)

Animal Origin AS.01.01	1	**Identify the origin, significance, distribution and domestication of animal species.** AS.01.01.1
	2	**Define major components of the animal industry.** AS.01.01.2
Classify Animals AS.02.01	1	**Explain the importance of the binomial system of nomenclature.** AS.02.01.1
	2	**Identify major animal species by common and scientific names.** AS.02.01.2
Comparative Anatomy & Physiology AS.02.02	1	**Identify basic characteristics of animal cells, tissues, organs and body systems.** AS.02.02.1
	2	**Diagram a typical animal cell and identify the organelles.** AS.02.02.2
	3	**Describe the basic functions of animal cells in growth and reproduction.** AS.02.02.3
	4	**Describe the properties, locations, functions and types of animal tissues.** AS.02.02.4
	5	**Describe the properties, locations, functions and types of animal organs.** AS.02.02.5
	6	**Describe the functions of the animal body systems and system components.** AS.02.02.6
Selecting Animals AS.02.03	1	**Identify ways an animal's health can be affected by anatomical and physiological disorders.** AS.02.03.1
	2	**Create a program to develop an animal to its highest potential performance.** AS.02.03.2
Prevention & Treatment of Animals AS.03.01	1	**Explain methods of determining animal health and disorders.** AS.03.01.1
	2	**Identify common diseases, parasites and physiological disorders that affect animals.** AS.03.01.2
	3	**Explain characteristics of causative agents and vectors of diseases and disorders in animals.** AS.03.01.3

	4	**Explain the clinical significance of common considerations in veterinary treatments, such as aseptic techniques.** AS.03.01.4
	5	**Identify and describe zoonotic diseases.** AS.03.01.5
Biosecurity AS.03.02	1	**Explain the importance of biosecurity to the animal industry.** AS.03.02.1
Formulate Feed Rations AS.04.01	1	**Compare and contrast common types of feedstuffs and the roles they play in the diets of animals.** AS.04.01.1
	2	**Explain the importance of a balanced ration for animals.** AS.04.01.2
Feed Additives & Growth Promotants AS.04.02	1	**Explain the purpose and benefits of feed additives and growth promotants in animal production.** AS.04.02.1
Male & Female Reproductive Systems AS.05.01	1	**Explain the male and female reproductive organs of the major animal species.** AS.05.01.1
Breeding Readiness & Soundness AS.05.02	1	**Explain how age, size, life cycle, maturity level and health status affect the reproductive efficiency of male and female animals.** AS.05.02.1
	2	**Discuss the importance of efficient and economic reproduction in animals.** AS.05.02.2
Scientific Principles in Breeding AS.05.03	1	**Explain genetic inheritance in agricultural animals.** AS.05.03.1
	2	**Define natural and artificial breeding methods.** AS.05.03.2
	3	**Explain the use of quantitative breeding values (e.g., EPDs) in the selection of genetically superior breeding stock.** AS.05.03.3
	4	**Explain the advantages of major reproductive management practices, including estrous synchronization, superovulation, flushing and embryo transfer.** AS.05.03.4
	5	**Discuss the uses and advantages and disadvantages of natural breeding and artificial insemination.** AS.05.03.5
Safe Animal Handling AS.06.01	1	**Discuss the dangers involved in working with animals.** AS.06.01.1
	2	**Explain the implications of animal welfare and animal rights for animal agriculture.** AS.06.01.2
Animal Product Safety AS.06.02	1	**Identify animal production practices that could pose health risks or are considered to pose risks by some.** AS.06.02.1

	2	**Describe how animal identification systems can track an animal's location, nutrition requirements, production progress and changes in health.** AS.06.02.2
Design Animal Facilities AS.07.01	1	**Identify facilities needed to house and produce each animal species safely and efficiently.** AS.07.01.1
	2	**Identify equipment and handling facilities used in modern animal production.** AS.07.01.2
Government Regulations & Standards AS.07.02	1	**List the general standards (e.g., environmental, zoning, construction) that must be met in facilities for animal production.** AS.07.02.1
Reducing Environment Effects AS.08.01	1	**Evaluate the effects of animal agriculture on the environment.** AS.08.01.1
Environment Conditions on Animals AS.08.02	1	**Identify optimal environmental conditions for animals.** AS.08.02.1