

## Animal Science Curriculum Map and Timeline

Time	Unit of Instruction	Standard	Assessment
5 Days	Introduction to FFA, Ag Education, and Agriculture	AFNR-ASB-2	
Lesson 1: Orientation to FFA and Ag Education		Orient and apply the comprehensive program of agricultural education, learns to work safely in the agriculture lab and work sites, demonstrates selected competences in leadership through the FFA and agricultural industry organizations, and develops plans for a Supervised Agricultural Experience Program (SAEP).	Daily Participation Worksheets Unit Tests Quizzes Videos Public Speaking
Lesson 2: Supervised Agricultural Experience Programs			
Lesson 3: Orientation to Agriculture			
Lesson 4: Safety			
5 Days	Demonstrate the application of scientific methods in agricultural animal research and production.	AFNR-ASB-3	
Lesson 1: Cite scientific discoveries in animal agriculture.		Explore and formulate a logical discussion about the animal industry including its scope, importance, and careers available in the animal science industries.	Daily Participation Worksheets Unit Tests Quizzes Videos
Lesson 2: Perform the steps involved in the scientific method			
Lesson 3: Investigate and reports on selected animal science technology/biotechnology careers.			
5 Days	Describe the various phases, segments, trends, consumption, and economic scope of the large animal industry.	AFNR-ASB-4	
Lesson 1: Describe the various segments of the beef industry.		Identify the various segments of the livestock industry and explain their functions.	Daily Participation Worksheets Unit Tests Quizzes Videos Problem Solving Group Work
Lesson 2: Assess the various phases of the swine industry.			
Lesson 3: Identify key production areas of beef cattle and hogs.			

Time	Unit of Instruction	Standard	Assessment
7 Days	Poultry industry		AFNR-ASB-5
Lesson 1:	Summarize the poultry industry's growth trends.	Describe poultry science trends, segments, and consumption.	Daily Participation Worksheets Unit Tests Quizzes Videos Problem Solving Group Work
Lesson 2:	Describe vertical integration using segments of the poultry industry as examples.		
Lesson 3:	Identify breeds of poultry		
Lesson 4:	Describe chick embryo development.		
7 Days	Dairy industry		AFNR-ASB-6
Lesson 1:	Identify the major areas and characteristics of dairy production in the United States and compares dairy production among the states.	Investigate the properties of dairy cattle determine the factors that affect dairy cattle productivity and dairy products..	Daily Participation Worksheets Unit Tests Quizzes Videos Problem Solving Group Work
Lesson 2:	Discuss breeds of dairy cows and their characteristics		
Lesson 3:	Identify dairy products, their use and their economic importance		
5 Days	Aquatic animals		AFNR-ASB-7
Lesson 1:	Explore the scope of the aquaculture industry	Evaluate trends in the aquaculture industry and the scientific principles involved in the production of aquatic animals.	Daily Participation Worksheets Unit Tests Quizzes Videos Problem Solving Group Work
Lesson 2:	Evaluate the feed-conversion efficiency of fish		
Lesson 3:	Research types of aquatic animal production in the United States		
Lesson 4:	Describe the methods and facilities used in the production of various aquatic animals.		
Lesson 5:	Interpret the behavioral characteristics of bullfrogs and alligators that make them difficult to produce in confinement		

Time	Unit of Instruction	Standard	Assessment
5 Days	Alternative and laboratory animals.		AFNR-ASB-8
	Lesson 1: Analyze the advantages and disadvantages of raising alternative agricultural animals. Lesson 2: Describe alternative animal agriculture industry Lesson 3: Explain the importance of the honeybee to agriculture and the society of the honeybee	Describe the various phases, segments, trends, demand, consumption and economic scope of the alternative and laboratory animals.	Daily Participation Worksheets Unit Tests Quizzes Videos Problem Solving Group Work
7 Days	Classifying agriculture animals		AFNR-ASB-9
	Lesson 1: Explain how agricultural animals are classified scientifically Lesson 2: Explain the use of the binomial system of classification. Lesson 3: Categorize common and distinguishing characteristics of several agricultural animals	Classify animals using scientific binomial nomenclature as well as classifies agriculture animals by breed and use..	Daily Participation Worksheets Unit Tests Quizzes Videos Problem Solving Group Work
6 Days	Food safety and environmental concerns.		AFNR-ASB-10
	Lesson 1: Rationalize consumer's concerns for food safety Lesson 2: Determine consumer concerns with various phases of the animal and meat industry	Explain and addresses the general public's food safety and environmental concerns	Daily Participation Quizzes Problem Solving Group Work
6 Days	Animal welfare		AFNR-ASB-11
	Lesson 1: Discern the difference between animal welfare and animal rights. Lesson 2: Debate management practices used in the production of agricultural animals.	Compare and contrast crucial animal welfare issues and explain the benefits of treating animals in a humane manner and providing for the needs of animals.	Daily Participation Quizzes Problem Solving Group Work

Time	Unit of Instruction	Standard	Assessment
7 Days	Behavior of agricultural animal		AFNR-ASB-12
	Lesson 1: Observe and interpret the natural behavior of agricultural animals and relate these behaviors to production practices yielding more content, healthier, and productive animals Lesson 2: Observe and interpret the natural behavior of agricultural animals and relate these behaviors to production practices yielding more content, healthier,	Observe and interpret the natural behavior of agricultural animals and relate these behaviors to production practices yielding more content, healthier, and productive animals	Daily Participation Worksheets Quizzes Videos Group Work
7 Days	Animal selection, breeding, and production.		AFNR-ASB-13
	Lesson 1: Explain the basic function of deoxyribonucleic acid (DNA) and ribonucleic acid (RNA) Lesson 2: Explain how traits are passed from parent to offspring through genetic transfer Lesson 3: Describe Expected Progeny Difference (EPD)	Apply genetic principles to animal selection, breeding, and production.	Daily Participation Worksheets Unit Tests Quizzes Videos Problem Solving Group Work
7 Days	Animal selection		AFNR-ASB-14
	Lesson 1: Explain the concept of natural selection Lesson 2: Compare and contrast the benefits of scientific animal selection and breeding by the producer with natural selection and random mating.	Apply scientific methods of animal selection and explain the advantages and disadvantages..	Daily Participation Quizzes Problem Solving Group Work

Time	Unit of Instruction	Standard	Assessment
5 Days	Reproduction of agricultural animals.		AFNR-ASB-15
Lesson 1:	Distinguish between asexual and sexual reproduction	Discuss the reproductive anatomy and biological processes involved in the reproduction of agricultural animals	Daily Participation Worksheets Quizzes Videos Group Work
Lesson 2:	Describe the parts and functions of the male and female reproductive system		
Lesson 3:	Analyze the functions of the hormones that control reproduction		
5 Days	Prenatal and postnatal growth and development of agricultural animals		AFNR-ASB-16
Lesson 1:	Measure the growth process in an animal	Create and interpret landscape plans based on industry standards and recommended practices.	Daily Participation Worksheets Unit Tests Quizzes Videos Problem Solving Group Work
Lesson 2:	Analyze the circumstances of growth that affect production enterprises		
Lesson 3:	Distinguish between prenatal and postnatal growth and illustrate the phases of each.		
5 Days	Monogastric and Ruminant Agricultural Animals		AFNR-ASB-17
Lesson 1:	List nutrients that are essential to the growth and development of animals	Explain nutrient sources and functions as they relate to monogastric and ruminant agricultural animals	Daily Participation Quizzes Problem Solving Group Work
Lesson 2:	List the sources of fats, minerals, vitamins, roughages, starches, sugars, proteins, etc., in animal rations		

Time	Unit of Instruction	Standard	Assessment
5 Days	Meat products and preservation		AFNR-ASB-18
	Lesson 1: Describe the physiological processes that take place in the animal's body at death. Lesson 2: Explain the steps in the slaughter of meat animals. Lesson 3: Explain the value of high versus low yield grades	Investigate the physiological and chemical properties of meat products and preservation.	Daily Participation Worksheets Quizzes Videos Group Work
5 Days	Parasites in agricultural animals		AFNR-ASB-19
	Lesson 1: Explain symbiotic relationships. Lesson 2: Distinguish between mutualism, commensalism, and parasitism Lesson 3: Identify parasites of agricultural animals and match the parasite to the host	Describe the effects, development, and control of parasites in agricultural animals.	Daily Participation Worksheets Unit Tests Quizzes Videos Problem Solving Group Work
5 Days	Animal diseases, animal immune systems, and disease prevention and control programs.		AFNR-ASB-20
	Lesson 1: List the types and characteristics of disease-causing organisms. Lesson 2: Describe three types and characteristics of bacteria	Identify and describe animal diseases, animal immune systems, and disease prevention and control programs..	Daily Participation Quizzes Problem Solving Group Work