

Animal Science Assessment Plans Rev. 4/26/2018

<b>Animal Science</b>	<b>14-15</b>	<b>15-16</b>	<b>16-17</b>	<b>17-18</b>	<b>18-19</b>	<b>19-20</b>
<b>ANSCB1 - Introduction to Animal Science</b>						
• Upon completion the student will be able to: Describe economically significant breeds of animals and their unique adaptations.		X				
• Upon completion the student will be able to: Discuss nutritional needs of animals and for various body functions.		X				
• Upon completion the student will be able to: Identify animal contributions to the development of human civilizations.		X				
• Upon completion the student will be able to: Describe the function of the major body systems.			X			
• Upon completion the student will be able to: Identify reproductive cycles and biotechnological principles of animal reproduction.			X			
• Upon completion the student will be able to: Analyze genetic change through artificial/natural selection.			X			
• Upon completion the student will be able to: Describe animal behavior as it relates to animal domestication, health and performance.			X			
• Upon completion the student will be able to: Explain basic strategies for disease control, prevention and management.			X			
• Upon completion the student will be able to: Utilize the scientific method to collect data, calculate production parameters and make scientifically-based management decisions.				X		
• Upon completion the student will be able to: Identify and discuss current issues affecting animal agriculture.				X		
<b>ANSCB2 - Beef Production</b>						
• Upon completion the student will be able to: Explain the history and development of Bos Taurus and Bos Indicus cattle and the modern breeds.				X		
• Upon completion the student will be able to: Design a plan for establishing and managing a breeding herd of purebred or commercial cattle.				X		
• Upon completion the student will be able to: Recognize desirable conformation/selection traits in 3 classes of cattle: replacement heifers, market steers, herd sires.				X		
• Upon completion the student will be able to: Estimate weights and age of market cattle.				X		
• Upon completion the student will be able to: Develop a herd health management program				X		
<b>ANSCB3 - Sheep Production</b>						
• Upon completion the student will be able to: Identify a minimum of eight common breeds of sheep and discuss in a group setting.					X	
• Analyze sheep by production data and live appraisal.					X	
• Perform basic scientific management procedures such as docking, castration, and shearing.					X	
• Identify cultural contributions and ethnic influences on the sheep industry.					X	
• List common diseases and parasites and their control.					X	
<b>ANSCB4 - Dairy Production</b>						
• Upon completion the student will be able to: Distinguish between the major dairy cattle breeds, and recall the origin, adaptation and production of each breed.				X		
• Upon completion the student will be able to: Identify the anatomical parts of the cow and relate each part to its form and function.				X		
• Upon completion the student will be able to: Define the nutritional needs and demonstrate proper feeding techniques of dairy cattle.				X		
• Upon completion the student will be able to: Demonstrate proper management skill involving dehorning, vaccinating, castrating, hoof trimming and teat removal of dairy cattle.				X		

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<b>ANSCB5 - Swine Production</b>						
• Identify common breeds of swine and list their respective economically important strengths.				X		
• Identify anatomical features of swine.				X		
• Analyze the most important swine diseases and parasites as well as the principles of their control including prevention and treatment.				X		
• Discuss nutrient requirements and feeding programs for various stages of swine production.				X		
<b>ANSCB6 - Applied Animal Nutrition</b>						
• Upon completion the student will be able to: Identify and describe the characteristics of commonly used feed ingredients for diet formulation.		X				
• Calculate and formulate concentrations & amounts of nutrients in rations and feed mixes.		X				
• Discuss the impact of feed processing on nutrient utilization by livestock.		X				
• Read and interpret feed tags and laboratory analyses of diet/feed ingredients.		X				
• Describe the general changes in nutrient requirements that occur throughout the life-cycle of beef cattle, dairy cattle, and swine.		X				
<b>ANSCB7 - Animal Diseases</b>						
• Upon completion the student will be able to: Differentiate between passive and active immunity.				X		
• Administer subcutaneous and intramuscular injections.				X		
• Diagnose disease(s), given clinical symptoms.				X		
• Treat bovine pinkeye.				X		
• Debate usage of antibiotics in food animal production.				X		
• Diagram the lifecycle of 5 common internal parasites.				X		
<b>ANSCB10 - Horse Production</b>						
• Upon completion the student will be able to: Demonstrate knowledge of practical equine reproductive management.				X		
• Demonstrate knowledge of common horse parasites, their role in disease processes, and their control.				X		
• List common infectious diseases and explain the role of preventive health and vaccination programs. Demonstrate skill in administering IM, SubQ, IV injections.				X		
• Explain the basic principles of digestion and design a practical ration for various stages of production in the equine.				X		
• Demonstrate a basic understanding of horse behavior in different surroundings.				X		
• Demonstrate ground safety while performing routine basic health and grooming tasks.				X		
• Explain the role of the horse in the development of civilization world-wide and the current contributions of the horse to society. • Identify eight common breeds of horses and assess the selection pressures involved in the development of each breed. • Demonstrate an understanding of conformation with respect to the horse's motion and intended use. • Relate form to function with regards to equine anatomy. • Demonstrate a basic understanding of horse behavior in different surroundings • Demonstrate ground safety while performing routine basic health and grooming tasks. • Identify career opportunities in the equine industry.				X		

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<b>ANSCB11 - Livestock Selection/Evaluation</b>						
• Upon completion the student will be able to: Identify common breeds of livestock.		X				
• Analyze the process of meat animal growth, development and finishing		X				
• Demonstrate how to combine visual subjective evaluation with objective methods of evaluation (production records, etc.).		X				
• List traits that cannot be greatly altered through selective breeding including Identification of traits and factors that affect carcass quality and yield grades		X				
• Define traits needing improvement in a breeding herd and identify traits most economically important.				X		
• Describe and compare animals with proper livestock terminology in both oral and written form. (AKA Defend with reasons)				X		
• Organize classes of live animals based on economically important traits.				X		
• Identify external, anatomical features of livestock and anatomical points on the live animal analogous to the areas of the carcass.				X		
• Identify external, anatomical features of livestock and anatomical points on the live animal analogous to the areas of the carcass.				X		
<b>ANSCB22 - Animals and Society</b>						
• Upon completion the student will be able to: Demonstrate fundamental concepts linking animals and people in geography.				X		
• Describe how these are concepts are manifest in different spaces, places and environments.				X		
• Demonstrate skills in problem definition				X		
• Interpret and data to determine the impact and interactions between animals and people				X		
<b>ANSCB83 - Introduction to Veterinary Technology</b>						
• Upon completion the student will be able to: Identify anatomical parts and explain their physiology for common large and small animals seen in veterinary practice.				X		
• Explain office management procedures and protocols, including record keeping and customer service. Master resume writing and job interview skills.				X		
• Demonstrate appropriate procedures for receiving and returning patients to clients for discharge, answering common billing and post visit care with client.				X		
• Demonstrate use of appropriate terminology related to assisting the doctor in examinations, procedures, including surgical and emergency situations, and in patient interaction.				X		
• Demonstrate understanding of basic biology, including cell structure and genetic principles, and basic principles of chemistry needed to succeed in a RVT career.				X		
<b>ANSCB84 - Small Animal Diseases</b>						
• Upon completion the student will be able to: Identify normal and abnormal vital statistics for specific animal species. (RPT)				X		
• Describe proper handling and restraint techniques for small animal species.				X		
• Discuss common etiology and clinical evidence of diseases.				X		
• Determine and distinguish appropriate husbandry and prevention programs needed to reduce incidence of diseases.				X		
• Identify zoonotic diseases and specific therapies pertaining to these diseases.				X		
• Communicate and relate with clients regarding post treatment care as determined by the veterinarian.				X		

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<b>ANSCB85 - Large Animal Diseases</b>						
• Upon completion the student will be able to: Identify normal and abnormal vital statistics for specific large animal species (emphasis on farm animals).				X		
• Describe proper handling and restraint techniques for large animal species.				X		
• Discuss common etiology and clinical evidence of diseases.				X		
• Determine appropriate husbandry, nursing and prevention programs needed to reduce incidence of diseases.				X		
• Identify zoonotic diseases and specific therapies pertaining to those diseases.				X		
• Communicate with clients regarding post treatment care as determined by the veterinarian.				X		
<b>ANSCB86 - Pharmacology for Veterinary Technician</b>						
• Upon completion the student will be able to: Stock pharmaceutical supplies and control their inventories.				X		
• Reconstitute medications and calculate dosages of prescribed medications.				X		
• Package, label and dispense prescription drugs.				X		
• Identify specific pharmaceutical agents.				X		
• Master Intramuscular, Subcutaneous, and Intramuscular methods of administration.				X		
<b>ANSCB88 - Surgery, Dental, Anesthesiology for Veterinary Technicians</b>						
• Upon completion the student will be able to: Able to determine appropriate instrumentation for specific procedures. and identify, prepare, and care for surgical instruments.				X		
• Ability to analyze surgical process and properly drape animals for surgery.				X		
• Evaluate surgical and dental procedures and demonstrate knowledge of surgical and dental prophylaxis procedures performable by RVTs.				X		
• Compare anesthetic agents, instruments, equipment, and monitoring procedures and select appropriate ones for various situations.				X		
• Be able to provide pain management and post surgical care.				X		
• Be able to instruct clients in proper pre and post surgical care.				X		
• Close incisions by various methods.				X		
<b>ANSCB90 - Emergency Medicine, Surgery/Nursing Procedures for Veterinary Technicians</b>						
• Upon completion the student will be able to: Differentiate between emergency and non-emergency situations.				X		
• Use triage techniques to properly handle patients.				X		
• Evaluate and provide supportive therapy techniques.				X		
• Compare drugs used in emergency practice, including dosage, routes of administration, and adverse effects.				X		
• Choose appropriate agents.				X		
• Understand surgical and medical techniques.				X		
• Evaluate case situation, determine appropriate action, inform and instruct clients with information relating to post emergency care.				X		
• Calculate dosages for medications and fluid therapy.				X		

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<b>ANSCB92 - Clinical Pathology for Veterinary Technicians</b>						
• Upon completion the student will be able to: Identify bacterial and fungal pathogens.				X		
• Identify ectoparasites				X		
• Compare normal and abnormal cells and substances in cytology and urinalysis.				X		
• Examine normal and abnormal blood values.				X		
• Perform routine clinical blood counts and evaluate sample results				X		
• Be able to perform post-mortem exam and evaluate findings.				X		
• Be able to collect, handle, store, and ship samples for laboratory workups.				X		
<b>ANSCB94 - Caged Birds, Laboratory, and Exotic Animal Medicine</b>						
• Upon completion the student will be able to: Compare and contrast normal and abnormal anatomy and physiology.				X		
• Identify and compare various exotic species.				X		
• Demonstrate knowledge of techniques to properly restrain various exotic species.				X		
• Demonstrate knowledge of techniques to perform and evaluate physical exams on various exotic species.				X		
• Explain procedures to collect specimens for laboratory tests from various exotic species.				X		
• Demonstrate knowledge, discernment, and application of laws pertaining to ownership of exotics.				X		
<b>ANSCB96 - Radiology, Ultrasound, and Diagnostic Imaging for Veterinary Technology</b>						
• Upon completion the student will be able to: Analyze knowledge of and ability to apply regulations regarding radiation and radiology safety (including diagnostic imaging).				X		
• Compare and contrast various manual, mechanical, and chemical restraints for diagnostic imaging.				X		
• Evaluate and demonstrate knowledge of procedures to prepare patients for imaging (e.g., radiography and ultrasonography), to safely obtain diagnostic images; to process radiographic film, and to maintain imaging equipment.				X		
• Evaluate radiographs, ultrasound, and electrocardiograms.				X		
• Analyze, discern and apply positioning techniques for properly performing imaging procedures.				X		