

ARKANSAS FFA VETERINARY SCIENCE CAREER DEVELOPMENT EVENT



I. Purpose

The purpose of the veterinary science career development event is to promote college and career readiness by providing opportunities to develop technical knowledge and demonstrate practical skills in the field of veterinary science.

II. Event Rules

A. Team can consist of four members with the all four members' scores counting toward the total team score.

B. Tools and Equipment:

1. Students will need to have: pencils, non-programmable calculators, and clipboards.
2. Arkansas FFA and the host site will provide the specific tools and equipment needed to complete the practicums.
3. Due to sanitation reasons, some items that may be needed in the event (such as Stethoscopes) will need to be provided by the participant or their chapter. Teams will be provided a list of specific items needed for a specific year based on the event activities.

III. Event Format

A. Written exam – 100 points

1. The objective, multiple choice exam is designed to determine team members' broad understanding of the veterinary science field. The written exam will consist of 50 multiple-choice questions. The resource material that questions will be pulled from is: **"Veterinary Science, Preparatory Training for the Veterinary Assistant"** by Floron C. Faries, Jr., DVM, MS.

2. Topics for the exam will be on a two year rotation as listed below:

a. Odd Years:

- Chapter 1: Introduction
- Chapter 4: Normal Animal
- Chapter 5: Animal Nutrition
- Chapter 9: Human & Animal Health
- Chapter 10: Infectious Diseases
- Chapter 11: Non-Infectious Diseases
- Chapter 12: Principles & Methods of Disease Control
- Chapter 15: Production Practices
- Chapter 17: Animal Management During Emergencies

b. Even Years:

- Chapter 1: Introduction
- Chapter 2: Practice Management
- Chapter 3: Patient Management

- Chapter 6: Handling & Restraining Animals
- Chapter 7: Assisting with Examinations & Treatments
- Chapter 8: Laboratory Aids & Examinations
- Chapter 13: Sterilization & Disinfection
- Chapter 14: Assisting with Surgery
- Chapter 16: Regulatory Veterinary Medicine

B. Identification – 100 points total

1. Participants will identify equipment, parasites and breeds/species for a total of 100 points (2 points per item). Identification lists are located at the end of this handout.

a. Equipment – 50 points (25 items)

- Participants will identify pieces of equipment (actual equipment or photos). Resource material: **“Veterinary Instruments and Equipment, a Pocket Guide”** by Teresa Sonsthagen.

b. Parasites – 30 points (15 items)

- Participants will identify parasites (specimen or photos). Resource material: Parasites powerpoint located on the www.arkansasffa.org website.

c. Breeds – 20 points (10 items)

- Participants will identify breeds of small and large animals (photos or live animals) based on the following three year rotation:
 - 2013: Dog Breeds (Resource: AKC Website, photos and drawings)
 - 2014: Cats, Rabbits, Birds, Small Mammals, Reptiles, Poultry and Potbellied Pig (Resource for cats: Cat Fanciers Association Website)
 - 2015: Dairy Cattle, Beef Cattle, Swine, Horse, Goat and Sheep (Resource: Oklahoma State University Animal Breeds website)

C. Practicums – 200 points total

1. Math Application Practicum – 100 points

a. The number of practicum questions will vary based on the type of activity that is assigned. Participants will have 30 minutes to complete the entire math application practicum. Questions may include conversions, dose calculations, dilutions, cost calculations and invoices.

2. Practicums – 100 points (Members will either compete in a handling and restraining practicum or a clinical procedure practicum)

a. Handling and Restraining Practicum

- Fifteen to thirty minutes will be allotted for this section depending on the activities selected each year. Participants are expected to talk through the handling and restraining steps to a judge as they are being scored. Judges may speak and ask questions to the participant at the end of each activity, if time allows. All handling and restraining scorecards can be found on the www.arkansasffa.org website.
- Possible Handling/Restraining Practicums include:

- Using a Cat Bag
- Carrying a Cat
- Restraint of the Cat for Cephalic Venipuncture
- Restraint of the Cat for Jugular Venipuncture
- Applying a Cat Muzzle
- Removing a Cat from a Cage
- “Cat Stretch” (Restraint of the Cat in Lateral Recumbency)
- Restraint of the Dog for Cephalic Venipuncture
- Applying a Commercial Dog Muzzle
- Applying a Gauze Dog Muzzle
- Restraint of the Dog for Jugular Venipuncture
- Restraint of a Small Dog in Lateral Recumbency
- Removing a Dog from a Cage or Kennel
- Restraint of the Dog for Venipuncture of the Lateral Saphenous Vein
- Restraint of the Dog in Sternal Recumbency
- Haltering Cattle
- Haltering a Horse
- Tying a Bowline Knot
- Tying a Double Half Hitch Knot
- Tying a Half Hitch
- Tying a Reefer’s Knot
- Tying a Square Knot
- Placing a Tail Tie
- Building a Temporary Rope Halter for a Cow
- Restraint of a Rabbit

b. Clinical Procedure Practicum

- Fifteen to thirty minutes will be allotted for this section depending on the activities selected each year. Participants are expected to talk through the clinical procedure steps to a judge as they are being scored. Judges may speak and ask questions to the participant at the end of the activity, if time allows. All clinical procedures scorecards can be found on the www.arkansasffa.org website.
- Possible Clinical Procedures Practicums include:
 - Administering Aural Medication
 - Administering an Intramuscular Injection
 - Administering Ophthalmic Medication
 - Administering a Subcutaneous Injection
 - Administering a Topical Medication
 - Bandage Application
 - Bandage Removal
 - Fecal Flotation

- Filling a Syringe
- Prepare a Gram-Stained Slide
- Use of a Microscope
- Open a Gown and Gloves
- Opening a Surgery Pack
- Prepare a Surgical Pack for Sterilization
- Prescription Filling
- Removal of Sutures
- Collect a Sample for Dermatophyte Culture and Inoculate Dermatophyte Culture Media
- Surgical Preparation

IV. Event Scoring

Written Exam	100 Points per member
Identification	100 Points per member
Math Application Practicum	100 Points per member
<u>Practicum</u>	<u>100 Points per member</u>
Maximum Total Points Per Member	4 00 Points
Maximum Total Points Per Team	1,600 Points

V. Tiebreakers

- A. Team tiebreakers will be settled in the following order:
1. Combined individual practicum total score.
 2. Combined individual written exam total score.
- B. Individual tiebreakers will be settled in the following order:
1. Combined practicum score
 2. Written exam score

**Arkansas Veterinary Science
Equipment and Materials Identification List**

- | | | |
|--|--------------------------------------|---|
| 100. Disposable Syringe | 131. Feeding Tube | 161. Allis Tissue Forceps |
| 101. Automatic Dose
Syringe | 132. Burdizzo
Emasculator | 162. Babcock Intestinal
Forceps |
| 102. Balling Gun | 133. Elastrator | 163. Backhus Towel |
| 103. Pill Counting Tray | 134. White Emasculator | 164. Scalpel Handles |
| 104. Ophthalmoscope | 135. Reimer Emasculator | 165. Scalpel Blades |
| 105. Otoscope | 136. Serra Emasculator | 166. Snook's Ovariectomy
Hook |
| 106. Stethoscope | 137. Obstetrical Chain and
Handle | 167. Half Circle Suture
Needle |
| 107. Fecalyzer | 138. Fetal Extractor | 168. Mayo-Hegar Needle
Holder |
| 108. Lead Apron, Gloves,
Thyroid Collar | 139. Hoof Pick | 169. Metzenbaum Scissors |
| 109. Tourniquet | 140. Hoof Nipper | 170. Mayo Scissors |
| 110. Guillotine Nail
Trimmer | 141. Hoof Knife | 171. Straight Littauer
Stitch Scissors |
| 111. Nail Scissors | 142. Hoof Rasp | 172. Lister Bandage
Scissors |
| 112. Silver Nitrate Stick | 143. Lead Rope | 173. Utility Bandage
Scissors |
| 113. Ear Bulb Syringe | 144. Chain Shank | 174. Alligator Forceps |
| 114. Animal Clippers | 145. Twitch – Humane | 175. Macintosh Laryngeal
Speculum |
| 115. Clipper Blades | 146. Twitch – Chain | 176. Miller Laryngeal
Speculum |
| 116. Fecal Loop | 147. Equine Mouth
Speculums | 177. Ambu Bag |
| 117. Ear Notcher | 148. Dental Float | 178. Jacquette Tarter
Scalers |
| 118. ID Tag Applicator | 149. Hog Snare | |
| 119. Tattoo Outfit: Manual | 150. Pig Tooth Nipper | |
| 120. Rope Halter | 151. Feline Restraint Bag | |
| 121. Halter | 152. Dog Snare | |
| 122. Squeeze Chute | 153. Muzzles – Nylon or
Leather | |
| 123. Magnet | 154. Elizabethan Collar | |
| 124. Horn Gouge | 155. Halsted Mosquito
Forceps | |
| 125. Barnes Dehorner | 156. Crile Forceps | |
| 126. Electric Dehorner | 157. Kelly Forceps | |
| 127. Endotracheal Tube | 158. Rat Tooth Forceps | |
| 128. Indwelling IV
Catheter | 159. Adson Tissue Forceps | |
| 129. IV Butterfly Catheter | 160. Brown-Adson Tissue
Forceps | |
| 130. Polypropylene
Urethral Catheter | | |

Arkansas Veterinary Science CDE - Parasite Identification List

- 200. **Blowfly** (Family Calliphoridae)
- 201. **Blowfly Maggot** (Family Calliphoridae)
- 202. **Cat Warble** (Genus *Cuterebra*)
- 203. **Cattle Grub** (Genus *Hypoderma*)
- 204. **Coccidia** (Genus *Isospora* or *Eimeria*)
- 205. **Demodectic Mite** (Genus *Demodex*)
- 206. **Ear Mite** (Family Ascaridae; Genus *Otodectes*)
- 207. **Fleas** (Genus *Ctenocephalides*)
- 208. **Flea Larva** (Genus *Ctenocephalides*)
- 209. **Flea Tapeworm** (Genus *Dipylidium*)
- 210. **Flea Tapeworm Egg** (Genus *Dipylidium*)
- 211. **Flea Tapeworm Segment** (Genus *Dipylidium*)
- 212. **Giardia** (Genus *Giardia*)
- 213. **Hard Tick** (Family Ixodidae; Genus *Amblyomma* or *Dermacentor*)
- 214. **Heartworm Adult** (Genus *Dirofilaria*)
- 215. **Heartworm Microfilaria** (Genus *Dirofilaria*)
- 216. **Hookworm Adult** (Family Ancylostomatidae; Genus *Ancylostoma*, *Uncinaria*, *Bunostomum* or *Globocephalus*)
- 217. **Hookworm Egg** (Family Ancylostomatidae; Genus *Ancylostoma*, *Uncinaria*, *Bunostomum* or *Globocephalus*)
- 218. **Horse Bots** (Genus *Gasterophilus*)
- 219. **Horse Strongyles** (Family Strongylidae; Genus *Strongylus*)
- 220. **Lice – Biting** (Order Mallophaga; Genus *Bovicola* or *Trichodectes*)
- 221. **Lice – Sucking** (Order Anoplura; Genus *Linognathus* or *Hematopinus*)
- 222. **Liver Fluke** (Class Trematoda; Genus *Fasciola*, *Fascioloides* or *Dicrocoelium*)
- 223. **Lungworm** (Family Metastrongylidae; Genus *Metastrongylus*, *Dictyocaulus* or *Aelurostrongylus*)
- 224. **Mosquito Adult** (Family Culicidae; Genus *Anopheles*, *Culex* or *Aedes*)
- 225. **Mosquito Larva** (Family Culicidae; Genus *Anopheles*, *Culex* or *Aedes*)
- 226. **Pinworm** (Genus *Oxyuris*)
- 227. **Roundworm Adult** (Family Ascarididae or Toxocaridae; Genus *Toxocara*, *Toxascaris*, *Ascaris*, *Parascaris* or *Neoscaris*)
- 228. **Roundworm Egg** (Family Ascarididae or Toxocaridae; Genus *Toxocara*, *Toxascaris*, *Ascaris*, *Parascaris* or *Neoscaris*)
- 229. **Sarcoptic Mite** (Family Ascaridae; Genus *Sarcoptes* or *Notoedres*)
- 230. **Taenia Tapeworm** (Family Taeniidae; Genus *Taenia*)
- 231. **Taenia Tapeworm Egg** (Family Taeniidae; Genus *Taenia*)
- 232. **Taenia Tapeworm Segment** (Family Taeniidae; Genus *Taenia*)
- 233. **Whipworm** (Genus *Trichuris*)
- 234. **Whipworm Egg** (Genus *Trichuris*)

**Arkansas Veterinary Science CDE
Breeds/Species Identification List**

Dogs

SPORTING GROUP

- 000. Brittany
- 001. Cocker Spaniel
- 002. English Setter
- 003. English Springer
Spaniel
- 004. German Shorthaired
Pointer
- 005. Golden Retriever
- 006. Irish Setter
- 007. Labrador Retriever
- 008. Weimaraner

NON-SPORTING GROUP

- 009. Bichon Frise
- 010. Boston Terrier
- 011. Bulldog
- 012. Chinese Shar-Pei
- 013. Chow Chow
- 014. Dalmation
- 015. Lhasa Apso
- 016. Standard Poodle

TERRIER GROUP

- 017. Bull Terrier
- 018. Cairn Terrier
- 019. Miniature Schnauzer
- 020. Parson Russell Terrier
- 021. Scottish Terrier
- 022. Smooth Fox Terrier
- 023. West Highland White
Terrier
- 024. Wire Fox Terrier

HERDING GROUP

- 025. Australian Cattle Dog
- 026. Australian Shepherd
- 027. Border Collie
- 028. Cardigan Welsh Corgi
- 029. Collie
- 030. German Shepherd
Dog
- 031. Old English Sheepdog
- 032. Pembroke Welsh
Corgi
- 033. Shetland Sheepdog

WORKING GROUP

- 034. Akita
- 035. Alaskan Malamute
- 036. Bernese Mountain
Dog
- 037. Boxer
- 038. Bullmastiff
- 039. Doberman Pinscher
- 040. Giant Schnauzer
- 041. Great Dane
- 042. Great Pyrenees
- 043. Mastiff
- 044. Newfoundland
- 045. Portuguese Water
Dog
- 046. Rottweiler
- 047. Saint Bernard
- 048. Samoyed
- 049. Siberian Husky
- 050. Standard Schnauzer

TOY GROUP

- 051. Cavalier King Charles
Spaniel
- 052. Chihuahua
- 053. Italian Greyhound
- 054. Maltese
- 055. Miniature Pinscher
- 056. Papillon
- 057. Pekingese
- 058. Pomeranian
- 059. Toy Poodle
- 060. Pug
- 061. Shih Tzu
- 062. Silky Terrier
- 063. Toy Fox Terrier
- 064. Yorkshire Terrier

HOUND GROUP

- 065. Afghan Hound
- 066. American Foxhound
- 067. Basenji
- 068. Basset Hound
- 069. Beagle
- 070. Black and Tan
Coonhound
- 071. Bloodhound
- 072. Dachshund
- 073. English Foxhound
- 074. Greyhound
- 075. Whippet

**Arkansas Veterinary Science CDE
Breeds/Species Identification List**

CATS

- 000. Abyssinian
- 001. American Shorthair
- 002. Burmese
- 003. Cornish Rex
- 004. Devon Rex
- 005. Exotic
- 006. Maine Coon
- 007. Manx
- 008. Persian
- 009. Ragdoll
- 010. Russian Blue
- 011. Siamese
- 012. Sphynx
- 013. Turkish Angora

RABBITS

- 014. American Fuzzy Lop
- 015. Angora
- 016. Californian
- 017. Dutch
- 018. Dwarf Hotot
- 019. English Spot
- 020. Flemish Giant
- 021. Jersey Wooly
- 022. Holland Lop
- 023. Netherland Dwarf
- 024. New Zealand
- 025. Polish
- 026. Mini-Rex
- 027. Satin

BIRDS

- 028. Cockatiel
- 029. Cockatoos
- 030. Love Birds
- 031. Parakeet
- 032. African Gray Parrot
- 033. Canary
- 034. Macaw
- 035. Mynah
- 036. Rainbow Larikeet
- 037. Society Finch
- 038. Sun Conure
- 039. Zebra Finch

SMALL MAMMALS

- 040. Chinchilla
- 041. Degus
- 042. Ferret
- 043. Gerbils
- 044. Guinea Pig
- 045. Hamster
- 046. Hedgehog
- 047. Sugar Glider

REPTILES

- 048. Chameleon
- 049. Gecko
- 050. Iguana
- 051. Lizard
- 052. Bearded Dragon
- 053. Snake
- 054. Turtle
- 055. Frog
- 056. Toad

POULTRY

- 057. Chicken – Cornish
- 058. Chicken – Leghorns
- 059. Chicken – Rhode
Island Red
- 060. Chicken – Plymouth
Rock
- 061. Duck
- 062. Geese
- 063. Quail
- 064. Turkey

OTHER

- 065. Potbellied Pig

**Arkansas Veterinary Science CDE
Breeds/Species Identification List**

DAIRY CATTLE

- 000. Ayrshire
- 001. Brown Swiss
- 002. Guernsey
- 003. Holstein
- 004. Jersey

BEEF CATTLE

- 005. Angus
- 006. Brahman
- 007. Charolais
- 008. Hereford
- 009. Simmental
- 010. Shorthorn

SWINE

- 011. American Landrace
- 012. Berkshire
- 013. Chester White
- 014. Duroc
- 015. Hampshire
- 016. Yorkshire

HORSE

- 017. Appaloosa
- 018. Arabian
- 019. Belgian
- 020. Clydesdale
- 021. Haflinger
- 022. Miniature
- 023. Morgan
- 024. Paint
- 025. Paso Fino
- 026. Percheron
- 027. Quarter Horse
- 028. Saddlebred
- 029. Standardbred
(w/cart)
- 030. Tennessee Walking
Horse
- 031. Thoroughbred
- 032. Donkey
- 033. Mule

GOAT

- 034. Alpine
- 035. Nubian
- 036. Angora
- 037. Boer
- 038. LaMancha
- 039. Oberhasli
- 040. Pygmy
- 041. Saanen
- 043. Toggenburg

SHEEP

- 044. Cheviot
- 045. Columbia
- 046. Dorset
- 047. Hampshire
- 048. Jacob
- 049. Merino
- 050. Montedale
- 051. Rambouillet
- 052. Southdown
- 053. Suffolk