

Veterinary Science

Nebraska Career Development Event
Handbook and Rules for 2019-2023

1. EVENT 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.

2. OBJECTIVES

- a. Participants will demonstrate professional ethics, decision-making, communication, and problem-solving skills
- b. Participants will demonstrate technical competency with small and large animals in the general areas of anatomy and physiology, clinical procedures, identification, health and safety, medical terminology (which are further detailed below)
- c. Team Activity Objectives
 - I. Identify and demonstrate knowledge of the following as a team:
 - i. Equipment and materials identification– 50 points (Appendix 1)
 - ii. Parasite/microscope identification– 30 points (Appendix 2)
 - iii. Breed/species Identification– 20 points (Appendix 3)
- d. Individual Practicum Objectives
 - I. Handling and Restraining Practicum
 - i. Explain *and* demonstrate proper handling and restraining steps to a judge. Judges may ask questions at the end, if time allows. (Appendix 4)
 - II. Clinical Procedure Practicum
 - i. Explain *and* demonstrate proper steps of a clinical procedure to a judge. Judges may ask questions at the end, if time allows. (Appendix 5)
- e. Individual Test Objectives
 - I. Demonstrate broad understanding of the veterinary science field. Topics for the exam may include:
 - i. Behavior
 1. Behavior terms, training and learning, flight zones
 - ii. Disease
 1. Causes and sources, signs and symptoms, treatment, prevention
 - iii. Medical terminology
 1. Anatomical terms, equipment terms, surgery terms, procedural terms, prescription terms, and abbreviations
 - iv. Medical records
 1. Cataloging, ethics-record handling
 - v. Anatomy/physiology
 1. Skeletal system, muscular system, cardiovascular system, digestive system, reproductive system, respiratory system, nervous system, urinary system and integumentary system
 - vi. Nutrition
 1. Nutrients, requirements, nutritional diseases, common nutritional considerations
 - vii. Animal Husbandry
 1. Housing, routine care, handling, breeding

- viii. Regulations
 - 1. Federal OSHA, MSDS
 - ix. Patient management
 - 1. Client interaction and support
 - x. Facility management

 - xi. Practice management
 - 1. Client interaction and support
 - xii. Genetics
 - 1. Punnett square, genetic terminology
 - xiii. Calculations
 - 1. Conversions, doses, dilutions, cost calculations, and invoices
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3. ELIGIBILITY

- a. This event is open to students in grades 9-12. The top three schools in a district may qualify a team to the state-level CDE. Teams shall consist of four students and all four-member scores are counted towards the team score. Schools must register a full team, however teams with less than four students may participate and will not be eligible to earn all points.
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4. RECOMMENDED ATTIRE

- a. ZERO TOLERANCE POLICY: Students who do not wear closed-toe and closed-heel shoes will not be allowed to participate in the the individual handling and restraint and individual clinical procedures practicum portions of the event.
 - b. Keeping in mind that students may be handling animals, scrubs or lab coats are encouraged to be worn over Official Dress or Professional Attire, such as dress pants and a collared shirt. Inappropriate dress, as determined by the event superintendent, may result in up to a 10% point deduction on the individual exam portion of the event.
 - c. It is recommended that students do not wear jewelry during the individual handling and restraint and individual clinical procedures practicum portions of the event.
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5. REQUIRED SUPPLIES AND EQUIPMENT

- a. Phones, tablets, electronic devices, and backpacks are not allowed in the event area. Please do not bring personal items to the CDE if possible. Any participant in possession of an electronic device with communication capabilities during the duration of the event is subject to disqualification.
- b. Required Supplies include:
 - I. Pencils

- II. Calculators
 - III. Clip Boards
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6. EVENT SCHEDULE

- a. Schools will be assigned to one of the two rotations based on their Agricultural Education District; check the general CDE schedule.
 - b. At check-in, teams will receive their rotation schedule.
 - c. Teams will rotate through four 30-minute rotations:
 - I. Written examination, handling and restraint practicum, and clinical procedures practicum are performed individually.
 - II. Identification is performed as a team.
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7. ANNUAL THEME

There is no annual theme or topic for this CDE.

8. EVENT FORMAT

- a. Format
 - I. Individual Written Exam
 - i. The objective, multiple-choice exam is designed to determine team members' broad understanding of the veterinary science field. All students will take the exam individually. Team members may not talk during the written exam. The written exam will consist of 25 multiple-choice questions (worth two points each) including math calculations. Thirty minutes will be given for the exam. Calculators are permitted and shall be provided by the student.
 - II. Team Identification
 - i. Participants will identify equipment, parasites, and breeds/species for a total of 50 items (worth two points each). Teams will work together to complete the identification section. Thirty minutes will be given for this activity.
 - xiv. Participants will identify pieces of equipment (using actual equipment and printed photographs). They will also need to have general knowledge about the use for each item. The identification list is located in (see appendix 1)
 - xv. Participants will identify parasites, parasites at different stages of lifecycle and microscopic items using printed photographs and/or specimens. The identification list is located in (see appendix 2)

- xvi. Participants will identify breeds of small and large animals (using printed photographs). The identification list is located in (see appendix 3)

III. Practicums

- i. Individual handling and restraining Practicum
 - 1. Four handling and restraining practicums will be selected. Each individual will be assigned to complete one of the four handling and restraining practicum. (30 points for the individual, 120 points total for the team).
- xvii. 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 in (see appendix 4 f)
- ii. Individual clinic procedure practicum
 - 1. Four clinical procedure practicums will be selected. Each individual will be assigned to complete one of the four clinical procedure practicums. (50 points for the individual, 200 points total for the team).
- xviii. 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 each activity, if time allows. All clinical procedure scorecards can be found in (see appendix 4).

9. SCORING

Event	Individual Points	Team Points
• Identification		150
• Clinical Procedures Practicum	50	200
• Handling and Restraining Practicum	30	120
• Written Exam	50	200
Total score	130	670

- a. Refer to appendix 4 and 5 to view Clinical Procedures and Handling and Restraining score cards.

10. TIEBREAKER

- a. In situations involving ties with individuals or teams, the following criteria will be used to break the tie
 - I. Individual
 - i. Higher Written Exam Score
 - ii. Higher Clinical Procedures Practicum
 - iii. Higher Handling and Restraining Practicum
 - iv. Accuracy of the math question(s) on the written exam
 - b. Team
 - I. Total team Written Exam Score
 - II. Total team Clinical Procedures Practicum
 - III. Total team Handling and Restraining Practicum
 - IV. Total team identification score
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11. RESOURCE MATERIALS

- a. The following site is to be used to prepare for the practicums:
 - I. Animal Science has produced a site and videos to help students prepare for the event and for general classroom use.
 - i. <http://animalscience.unl.edu/nebraska-state-ffa-veterinary-science-contest>
- b. The following resources are to be used to prepare for the individual exam:
 - I. Veterinary Assisting: Fundamentals and Applications. Vanhorn. Clark.
 - i. <https://go.unl.edu/veterinaryassisting-fundamentalsandapplications>
 - II. Manual of Clinical Procedures
 - i. <https://go.unl.edu/purchasemanualofclinicalprocedures>
 - III. Small Animal Care and Management. Warren.
 - i. <https://go.unl.edu/smallanimalcareandmanagement>
 - IV. An Illustrated Guide to Veterinary Medical Terminology. Romich.
 - i. <https://go.unl.edu/veterinarymedicalterminology>
 - V. Anatomy and Physiology of Animals
 - i. <https://go.unl.edu/anatomyandphysiologyofanimals>

12. PAST EXAMS

- a. Past exams will be updated on the UNL Animal Science Veterinary Science CDE resources website:
 - i. <http://animalscience.unl.edu/nebraska-state-ffa-veterinary-science-contest>

13. POST-CDE DEBRIEFING OPPORTUNITY

- a. Following the completion of each of the hands-on rotations, judges will show contestants the proper method for the handling & restraint practicum and clinical procedures practicum.
 - b. Teams will receive their score sheets after results are released.
 - c. Due to time restraints, a complete debriefing with advisors is not available.
 - d. Contestants and teachers are NOT allowed to take pictures or video of procedures or identification specimens.
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Appendix

Appendix 1: Equipment & Materials Identification List

Equipment and Materials Identification List

100. Ambubag
101. Anesthetic machines
102. Autoclave
103. Autoclave tape indicator
104. Backhaus towel clamps
105. Balling gun
106. Bandaging material — Elasticon
107. Bandaging material — roll gauze
108. Bandaging material — vet wrap
109. Bands (castration or docking)
110. Cat bag
111. Catch pole (dog snare)
112. Catheter — butterfly
113. Catheter — IV
114. Catheter — Tomcat urinary
115. Centrifuge
116. Chemical indicator strips
117. Cold sterile tray
118. Dehorner — Barnes
119. Dehorner — electric
120. Dental floats
121. Dental scaler
122. Drench gun — small ruminant
123. Ear notcher
124. Elastrator
125. Elizabethan collar
126. Emasculators
127. Endoscope
128. Endotracheal tubes
129. Fecal loop
130. Fecalyzers
131. Feeding tube for small animals
132. Fetal extractor — calf
133. Forceps — Alligator
134. Forceps — Allis tissue
135. Forceps — Babcock tissue
136. Forceps — Brown-Adson thumb
137. Forceps — Crile
138. Forceps — Kelly
139. Forceps — Halstead mosquito hemostatic
140. Forceps — Rat tooth thumb
141. Gravity feeder/J tube
142. Head gate
143. Hog snare
144. Hoof knife
145. Hoof rasp
146. IV administration set
147. Laparoscope
148. Laryngoscopes
149. Muzzle — basket
150. Muzzle — nylon
151. Needle holder — Mayo-Hegar
152. Needle holder — Olsen-Hegar
153. Obstetrical chain and handle
154. Ophthalmoscope
155. Otoscope
156. Pig tooth nippers
157. Radiology personal protective equipment
158. Rectal prolapse ring — swine
159. Rumen magnet
160. Scalpel blade
161. Scalpel handle
162. Scissors — Suture wire cutting
163. Scissors — Bandage
164. Scissors — Lister bandage
165. Scissors — Littauer suture removal
166. Scissors — Mayo dissecting
167. Scissors — Metzenbaum dissecting
168. Silver nitrate sticks
169. Small animal oxygen cage
170. Snook ovariohysterectomy hook
171. Speculum — large animal oral
172. Speculum — small animal oral
173. Speculum — vaginal
174. Squeeze chute
175. Staple remover
176. Stethoscope
177. Surgical drapes
178. Suture needle — cutting
179. Suture needle — taper
180. Syringe — automatic, multi-dose
181. Tattooing instruments — small and large
182. Tonometer
183. Tourniquet
184. Trocar and cannula
185. Twitch chain
186. Twitch handle

Appendix 2: Parasite/Microscope Identification List

Parasite/Microscopic Identification List

200. Blowfly (Family *Calliphoridae*)
201. Calcium oxalate crystals
202. Cat Warble (Genus *Cuterebra*)
203. Cocci (bacteria)
204. Coccidia (Genus *Isospora* or *Eimeria*)
205. Demodectic Mite (Genus *Demodex*)
206. Ear Mite (Family *Psoroptidae*; Genus *Otodectes*)
207. Eosinophils
208. Epithelial cells (urine)
209. Flea Larva (Genus *Ctenocephalides*)
210. Flea Tapeworm Egg* (Genus *Dipylidium*)
211. Flea Tapeworm Segment* (Genus *Dipylidium*)
212. Flea Tapeworm* (Genus *Dipylidium*)
213. Fleas* (Genus *Ctenocephalides*)
214. Giardia* (Genus *Giardia*)
215. Heartworm Adult* (Genus *Dirofilaria*)
216. Heartworm Microfilaria* (Genus *Dirofilaria*)
217. Hookworm Adult* (Family *Ancylostomatidae*; Genus *Ancylostoma*, *Uncinaria*, *Bunostomum* or *Globocephalus*)
218. Hookworm Egg* (Family *Ancylostomatidae*; Genus *Ancylostoma*, *Uncinaria*, *Bunostomum* or *Globocephalus*)
219. Horse Bots* (Genus *Gasterophilus*)
220. Horse Strongyles* (Family *Strongylidae*; Genus *Strongylus*)
221. Lice — Biting (Order Mallophaga; Genus *Bovicola* or *Trichodectes*)
222. Lice — Sucking (Order Anoplura; Genus *Linognathus* or *Hematopinus*)
223. Liver Fluke (Class Trematoda; Genus *Fasciola*, *Fascioloides* or *Dicrocoelium*)
224. Mosquito Adult (Family *Culicidae*; Genus *Anopheles*, *Culex* or *Aedes*)
225. Mosquito Larva (Family *Culicidae*; Genus *Anopheles*, *Culex* or *Aedes*)
226. Neutrophils
227. Platelets
228. Red blood cell (erythrocyte)
229. Rod (bacteria)
230. Roundworm Adult* (Family *Ascarididae* or *Toxocaridae*; Genus *Toxocara*, *Toxascaris*, *Ascaris*, *Parascaris* or *Neoascaris*)
231. Roundworm Egg* (Family *Ascarididae* or *Toxocaridae*; Genus *Toxocara*, *Toxascaris*, *Ascaris*, *Parascaris* or *Neoascaris*)
232. Sarcoptic Mite (Family *Sarcoptidae*; Genus *Sarcoptes* or *Notoedres*)
233. Struvite crystals (triple magnesium phosphate)
234. Taenia Tapeworm Egg* (Family *Taeniidae*; Genus *Taenia*)
235. Taenia Tapeworm Segment* (Family *Taeniidae*; Genus *Taenia*)
236. Taenia Tapeworm* (Family *Taeniidae*; Genus *Taenia*)
237. Tick — American Dog (Family *Dermacentor*; Genus *variabilis*)
238. Tick — Black Legged Deer (Family *Ixodes*; Genus *scapularis*)
239. Tick — Brown Dog (Family *Rhipicephalus*; Genus *sanguineus*)
240. Tick — Lonestar (Family *Amblyomma*; Genus *americanum*)
241. Whipworm Egg* (Genus *Trichuris*)
242. Whipworm* (Genus *Trichuris*)
243. Yeast (cytology)

*Asterisk indicates which parasite life cycles could have questions.

Appendix 3: Breed/Species Identification List

Breed/Species Identification List

DOGS

Herding Group

- 300. Australian Cattle Dog
- 301. Australian Shepherd
- 302. Border Collie
- 303. Collie
- 304. German Shepherd Dog
- 305. Old English Sheepdog
- 306. Pembroke Welsh Corgi
- 307. Shetland Sheepdog

Hound Group

- 308. Afghan Hound
- 309. Basenji
- 310. Basset Hound
- 311. Beagle
- 312. Black and Tan Coonhound
- 313. Bloodhound
- 314. Dachshund
- 315. Greyhound
- 316. Rhodesian Ridgeback

Non-Sporting Group

- 317. Bichon Frise
- 318. Boston Terrier
- 319. Bulldog
- 320. Chinese Shar-Pei
- 321. Chow Chow
- 322. Dalmatian
- 323. Poodle

Sporting Group

- 324. Brittany Spaniel
- 325. Cocker Spaniel
- 326. English Setter
- 327. German Shorthaired Pointer
- 328. Golden Retriever
- 329. Irish Setter
- 330. Labrador Retriever
- 331. Weimaraner

Terrier Group

- 332. Bull Terrier
- 333. Cairn Terrier
- 334. Parson Russell Terrier
- 335. Scottish Terrier
- 336. West Highland White Terrier

Toy Group

- 337. Cavalier King Charles Spaniel
- 338. Chihuahua
- 339. Miniature Pinscher
- 340. Papillon
- 341. Pekingese
- 342. Pomeranian

- 343. Poodle
- 344. Pug
- 345. Shih Tzu
- 346. Yorkshire Terrier

Working Group

- 347. Bernese Mountain Dog
- 348. Boxer
- 349. Doberman Pinscher
- 350. Great Dane
- 351. Great Pyrenees
- 352. Mastiff
- 353. Newfoundland
- 354. Portuguese Water Dog
- 355. Rottweiler
- 356. Saint Bernard
- 357. Siberian Husky
- 358. Standard Schnauzer

CATS

- 359. Abyssinian
- 360. American Shorthair
- 361. Burmese
- 362. Maine Coon
- 363. Manx
- 364. Persian
- 365. Ragdoll
- 366. Russian Blue
- 367. Siamese
- 368. Sphynx

BIRDS

- 369. African Gray Parrot
- 370. Canary
- 371. Cockatiel
- 372. Cockatoos
- 373. Love Birds
- 374. Macaw
- 375. Parakeet
- 376. Sun Conure
- 377. Zebra Finch

REPTILES

- 378. Bearded Dragon
- 379. Chameleon
- 380. Gecko
- 381. Iguana

POULTRY

- 382. Chicken — Cornish
- 383. Chicken — Leghorns
- 384. Chicken — Plymouth Rock
- 385. Chicken — Rhode Island Red
- 386. Duck
- 387. Geese
- 388. Quail
- 389. Turkey

SMALL MAMMALS

- 390. Chinchilla
- 391. Ferret
- 392. Gerbils
- 393. Guinea Pig
- 394. Hamster
- 395. Hedgehog
- 396. Sugar Glider

RABBITS

- 397. Angora
- 398. Californian
- 399. Dutch
- 400. English Spot
- 401. Holland Lop
- 402. Mini-Rex
- 403. Netherland Dwarf
- 404. New Zealand

DAIRY CATTLE

- 405. Ayrshire
- 406. Brown Swiss
- 407. Guernsey
- 408. Holstein
- 409. Jersey

BEEF CATTLE

- 410. Angus
- 411. Brahman
- 412. Charolais
- 413. Hereford
- 414. Shorthorn
- 415. Simmental

HORSE

- 416. Appaloosa
- 417. Arabian
- 418. Belgian
- 419. Clydesdale
- 420. Morgan
- 421. Paint
- 422. Percheron
- 423. Quarter Horse
- 424. Saddlebred
- 425. Tennessee Walking Horse
- 426. Thoroughbred

GOAT

- 427. Alpine
- 428. Nubian
- 429. Angora
- 430. Boer
- 431. LaMancha
- 432. Saanen
- 433. Toggenburg

SHEEP

- 434. Columbia
- 435. Dorper
- 436. Dorset
- 437. Hampshire
- 438. Merino
- 439. Rambouillet
- 440. Southdown
- 441. Suffolk

SWINE

- 442. American Landrace
- 443. Berkshire
- 444. Chester White
- 445. Duroc
- 446. Hampshire
- 447. Yorkshire

Appendix 4: Handling and Restraint Score Cards

Handling and Restraining Practicum

REMOVING A CAT FROM A CAGE AND PLACING IN CAT BAG

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student opens the cage door and calls the cat by name.	2	
The student scruffs the cat with one hand and lifts it up.	3	
The student cradles the cat's abdomen with their other hand and removes the cat from the cage.	2	
With the cat still scruffed, the student places the cat under one arm close to his or her body and closes the cage door with his or her free hand.	3	
The student carries the cat to the exam table while holding the cat close to his or her body.	3	
The student scruffs the cat and lifts it into the bag in one swift motion while supporting the hind end.	4	
The student wraps the Velcro strap around the cat's neck and immediately zips up the bag.	4	
The student uses the proper zippered opening to expose the front limb.	4	
To remove the cat, the student removes the Velcro strap first, then unzips the bag and removes the cat by scruffing and supports the hind end.	5	
TOTAL POINTS	30	

Handling and Restraining Practicum

APPLYING A CAT MUZZLE

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student opens the cage door and calls the cat by name.	2	
The student scruffs the cat with one hand and lifts it up.	2	
The student cradles the cat's abdomen with their other hand and removes the cat from the cage.	2	
With the cat still scruffed, the student places the cat under one arm close to his or her body and closes the cage door with his or her free hand.	2	
The student places cat on table.	2	
The student selects a muzzle of appropriate size for the cat.	5	
The student places the cat in sitting or sternal position on exam table.	2	
The student positions the muzzle properly in his or her hands.	3	
The student approaches the cat from behind with the muzzle in both hands while another person restrains cat.	3	
The student brings the muzzle up to the cat's face in one swift motion.	4	
The student secures the muzzle.	3	
TOTAL POINTS	30	

Handling and Restraining Practicum

RESTRAINT OF THE CAT IN LATERAL RECUMBENCY FOR FEMORAL VENIPUNCTURE

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student places the cat on an examination table.	3	
The student scruffs the cat with one hand and lifts it off the table enough to grasp both hind legs with his or her other hand and reaches under cat to grasp both hind limbs.	8	
The student lays the cat on its side with the hind legs stretched rearward.	7	
The student tucks top rear leg and tail while occluding with side of hand.	8	
The student speaks to the patient in a calm and affectionate manner during the procedure.	4	
TOTAL POINTS	30	

Handling and Restraining Practicum

RESTRAINT OF THE CAT FOR JUGULAR VENIPUNCTURE

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student places the cat in sternal recumbency with its chest close to the edge of the table.	6	
The student controls and lifts the head up by placing thumb and forefingers over top of head, fingers firm on zygomatic arches (below eyes).	7	
The student's other hand grasps the front legs and extends them down off the edge of the table.	7	
The student uses arm and elbow to restrain the cat's body close to the student's body.	6	
The student speaks to the patient in a calm and affectionate manner during the procedure.	4	
TOTAL POINTS	30	

Handling and Restraining Practicum

RESTRAINT OF THE CAT FOR CEPHALIC IV CATHETER PLACEMENT

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student places the cat in sternal recumbency on an examination table.	4	
The student controls and lifts the head up by placing thumb and forefingers over top of head, fingers firm on zygomatic arches (below eyes).	7	
The student extends the left front limb forward by grasping the elbow in the palm of his or her hand with thumb on the top of the elbow joint.	7	
The student allows the judge to grasp the left front paw and extend the limb toward him or her.	5	
The student occludes the vein by pressing down on the top of the elbow joint with his or her thumb and then rotating his or her thumb laterally.	7	
TOTAL POINTS	30	

Handling and Restraining Practicum

APPLYING A GAUZE DOG MUZZLE

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student selects proper type of material and length.	4	
The student places the dog in sitting or sternal position on exam table or floor.	2	
The student makes a loop in the gauze and approaches the dog from behind.	6	
The student places the loop on the dog's face with the tie on top.	6	
The student quickly tightens the loop and then crosses the ends under the dog's face.	6	
The student brings the ends back behind the dog's head under the ears and ties in a quick-release bow.	6	
TOTAL POINTS	30	

Handling and Restraining Practicum

APPLYING A NYLON DOG MUZZLE

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student selects appropriate muzzle.	4	
The student places the dog in sitting or sternal position on exam table or floor.	2	
The student comes from behind the dog's head with the muzzle in one hand in the correct position.	7	
The student brings the muzzle up to the dog's face and slips it on while grasping the strap with the other hand.	6	
The student secures the muzzle.	5	
The student checks for proper fit (one finger inserted under the strap).	6	
TOTAL POINTS	30	

Handling and Restraining Practicum

RESTRAINT OF THE SMALL DOG FOR JUGULAR VENIPUNCTURE

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student puts a noose leash on the dog and has the dog sit.	3	
The student places one arm around the dog's neck and places the other arm around the dog's back to grasp the forelimbs.	6	
The student pushes the dog's back with his or her body to encourage the dog to lie down.	6	
The student holds the head up under the jaw, away from the chest (can be achieved by cupping hand underneath the muzzle and by pushing the head upward).	8	
The student's other hand grasps the front legs and extends them over the end of the table.	7	
TOTAL POINTS	30	

Handling and Restraining Practicum

REMOVING DOG FROM FLOOR LEVEL CAGE TO RESTRAIN FOR LATERAL SAPHENOUS VENIPUNCTURE

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student places a leash in one hand with a large loop open in the correct position (in the "P") and ready to place over the dog's head.	2	
While blocking the opening, the student opens the cage door enough to slip the hand holding the leash into the cage.	2	
The student slips the leash over the neck of the dog and gently tightens the leash around the neck.	2	
The student opens the door and allows the dog to exit the cage.	1	
The student lifts the dog and places on the table.	1	
The student places his or her right arm across the dog's neck and reaches between the front legs to grasp the dog's right forelimb in right hand.	4	
The student places left arm over the dog's back and reaches for the dog's right rear limb, just proximal to the hock.	5	
With the dog's body close, the student gently lifts the limbs while allowing the dog's body to lay on the table; the dog should be on its right side.	5	
The student allows the dog to relax for a couple seconds, not releasing the grasp on the limbs.	3	
The student uses left hand to hold the limb tightly in the area just distal to the stifle, which will occlude the vein.	5	
TOTAL POINTS	30	

Handling and Restraining Practicum

RESTRAINT OF THE DOG FOR CEPHALIC VENIPUNCTURE

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student places a noose leash on the dog.	2	
The student restrains the dog in sternal recumbency.	5	
The student stands on the dog's right side, wrapping his or her right arm around the dog's neck.	5	
The student holds the dog's left forelimb with elbow in the palm of his or her hand and extend the limb forward toward the person performing the procedure.	6	
With the elbow of the dog in his or her palm, the student rotates his or her thumb up so it is on top of the limb at the bend of the elbow.	6	
The student occludes the vessel with the thumb and rotates the thumb laterally.	6	
TOTAL POINTS	30	

Handling and Restraining Practicum

RESTRAINT OF A RABBIT

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student approaches the rabbit calmly and quietly.	4	
The student scruffs the rabbit with one hand while gently lifting the front end.	6	
The student's other hand immediately reaches under the hind limbs and holds them (not allowing the hind limbs to dangle).	7	
The student rests the rabbit's body on the arm with the hand holding the hind limbs.	6	
The scruffing hold is released, and the hand is moved to hold the rabbit's outside front leg.	7	
TOTAL POINTS	30	

Handling and Restraining Practicum

HALTERING RUMINANTS

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
Without quick movements and loud noises, the student properly approaches the patient at a 45-degree angle to the patient's left shoulder.	5	
The student places crown piece of halter over ears, then slips nose through nosepiece.	6	
The student properly adjusts the halter such that the nose band crosses over bridge of nose halfway between the nostrils and eyes.	7	
The student ensures that the adjustable portion of the nose band is under the chin, not across the bridge of the nose.	6	
The student keeps the standing end or lead rope portion on the left side of the patient.	6	
TOTAL POINTS	30	

Handling and Restraining Practicum

PLACING A TAIL TIE

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student lays the rope over the tail at the tip of the tail bone.	6	
The student folds all the tail hairs up over the rope.	6	
The student passes the short end of the rope behind the tail, and makes a fold or bight in it.	6	
The student passes the fold or bight over the folded tail and under the rope, which is looped around the tail.	6	
The student pulls tight.	6	
TOTAL POINTS	30	

Handling and Restraining Practicum

HALTERING A HORSE

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
Without quick movements and loud noises, the student properly approaches the patient at a 45-degree angle to the patient's left shoulder.	5	
The student places end of the lead rope over the horse's neck and passes sufficient length of lead to form a handheld loop around the horse's neck.	5	
Holding the handheld loop in his or her right hand, the student uses his or her left hand to slip the nose-band of the halter over the nose.	5	
Student releases the lead rope and with their right hand under the horse's neck, the student passes the crown strap over the head and behind the ears and attaches the end to the appropriate place on the halter.	5	
The student snaps the end of the lead to the lead ring of the halter and undrapes the lead rope from the horse's neck.	4	
The student adjusts the halter, so it is snug enough that the nose piece could not fall over the end of the nose but not so tight that the halter cuts or rubs the horse or restricts jaw movement or breathing.	6	
TOTAL POINTS	30	

Handling and Restraining Practicum

SNARE RESTRAINT OF THE PIG

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student, standing next to the patient, guides the loop of the snare into the mouth and over the nose or upper jaw.	4	
The student makes sure the loop is inserted far enough into the patient's mouth.	5	
The student pulls the loop tight when it is in the proper position.	5	
The student keeps the loop tight while moving to the front of the patient.	5	
The student maintains the pressure on the snare so that the patient cannot escape.	5	
The student keeps control of the patient until the patient ceases to struggle.	4	
The student releases the patient after the procedure is completed	2	
TOTAL POINTS	30	

Handling and Restraining Practicum

APPLYING ELIZABETHAN COLLAR

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student chooses the correct size of E-collar for the patient.	6	
The student correctly prepares the E-collar for placement.	6	
The student correctly places the E-collar on the animal.	6	
Placement is adequately secured so the animal cannot remove the E-collar.	6	
The E-collar is secured such that the animal's breathing is not restricted.	6	
TOTAL POINTS	30	

Appendix 5: Clinical Procedures Score Cards

Clinical Procedures Practicum

ADMINISTERING AURAL MEDICATION

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student successfully administered the proper amount of medication into the ear canal. <ul style="list-style-type: none">• Ear pinna held upright• Correct amount of medication was administered without contamination	20	
The student massages the base of the outside of the ear canal causing a swishing sound from the medication moving around in the ear canal.	15	
The student wipes any solution that may have leaked onto the outside of the ear flap or hair.	15	
TOTAL POINTS	50	

Clinical Procedures Practicum

ADMINISTERING OPHTHALMIC MEDICATION

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student wipes any discharge from the patient's eye using a gauze sponge or cotton ball.	8	
The student opens the end of the ophthalmic medicine	6	
The student uses the index finger and thumb to pull the upper and lower lids apart to open the eye. The student's thumb pulls the lower lid down and the index finger pulls the upper lid upward. The student's other finger may rest on the head of the animal.	12	
While resting the hand holding the medication on the head of the patient, the student applies the drops or ointment gently into the eye without touching the eye, counting each drop or applying the proper amount of ointment without contamination.	12	
The student releases the eyelids.	6	
The student allows the animal to blink to move the medication throughout the eye.	6	
TOTAL POINTS	50	

Clinical Procedures Practicum

ADMINISTERING AN INTRAMUSCULAR INJECTION

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student selected the proper site for administration.	10	
The student directs the needle through the skin and into the muscle.	10	
The student aspirates; if no blood is noted, injects.	10	
The student withdraws the needle and places in the sharps container.	10	
The student massages the area where the injection was given and praises the patient.	10	
TOTAL POINTS	50	

Clinical Procedures Practicum

ADMINISTERING A SUBCUTANEOUS INJECTION

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student lifts the skin using the thumb and forefinger forming a triangle or tent with the skin.	10	
The student inserts the needle into the skin at the base of the tent or triangle parallel to the body.	10	
The student aspirates, looking for any signs of blood entering the syringe; if no blood enters the syringe, the student administers the injection.	10	
The student withdraws the needle and places in the sharps container.	10	
The student rubs the injection site and praises the patient.	10	
TOTAL POINTS	50	

Clinical Procedures Practicum

BANDAGE REMOVAL

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student chooses the bandage scissors and holds in proper orientation.	10	
The student keeps the blade flat against the body and the tip raised slightly upward in contact with bandage.	10	
The student begins cutting each layer from the distal end moving proximally.	10	
The student gently removes each layer of bandage.	10	
The student notes the status of the unbandaged area and states if it is normal or if there are any problems.	6	
The student cleans up work area.	4	
TOTAL POINTS	50	

Clinical Procedures Practicum

FILLING A SYRINGE FOR INJECTION

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student determines the amount to be placed in the syringe.	6	
The student selects the proper-sized syringe.	8	
The student inserts the syringe into the top of the bottle.	6	
The student places the bottle upside down in one hand and holds securely.	6	
The student withdraws the proper volume.	6	
The student removes the syringe from the bottle.	6	
The student gently taps or snaps the edge of the syringe to remove any air bubbles or slightly expels the air by pushing the end of the plunger.	6	
The student places syringe in the sharps container.	6	
TOTAL POINTS	50	

Clinical Procedures Practicum

FECAL FLOTATION WITH FECALYZER

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student selects about 1/4 teaspoon of feces and places it into a fecalyzer.	6	
The student adds enough flotation solution to fill the fecalyzer about half full.	6	
The student mixes the feces into solution until no large fecal particles remain.	6	
The student places insert into fecalyzer.	6	
The student fills the vial with more solution until there is a visible meniscus at the top.	6	
The student places a cover slip on top of the fecalyzer.	6	
The student allows the vial to sit undisturbed for 10 to 15 minutes.	6	
The student carefully removes the cover slip without tilting it and places it on a microscope slide.	8	
TOTAL POINTS	50	

Clinical Procedures Practicum

OPENING A SURGERY PACK

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student places the surgery pack on a clean, dry surface.	4	
The student removes or tears the tape securing the package.	4	
The student opens the first flap away from them.	8	
The student opens the side flaps without reaching across open pack.	8	
The student opens the last flap toward them.	8	
The student opens the pack without contamination.	12	
The student steps away so the surgeon or scrub nurse can complete the opening of the pack.	6	
TOTAL POINTS	50	

Clinical Procedures Practicum

PREPARE A SURGICAL PACK FOR STERILIZATION

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student gathers the appropriate instruments and instrument pan if applicable.	5	
The student gathers additional supplies if applicable.	10	
The student selects the appropriate packaging material and chemical indicator.	10	
The student assembles the pack correctly by following the instructions on the checklist or recipe.	10	
The student places the chemical indicator in the correct area of the pack.	10	
The student properly wraps, secures and labels the pack.	5	
TOTAL POINTS	50	

Clinical Procedures Practicum

SURGICAL SITE PREPARATION

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student applies antiseptic scrub to clipped area.	8	
The student preps the clipped area with a clean surgical sponge beginning at the incision site moving in a circular motion and works toward the edges.	8	
The student does not bring the sponge back to the incision site once it is moved away from the incision site.	8	
The student discards the sponge once it reaches the edge of the clipped area.	8	
The student wipes the clipped area with a rinse solution using a clean surgical sponge following the same pattern as when scrubbing with the antiseptic.	8	
The student repeats the scrub and rinse a minimum of three times or until the final rinse sponge was clean.	10	
TOTAL POINTS	50	

Clinical Procedures Practicum

PRESCRIPTION FILLING

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student reads and verbally interprets prescription.	10	
The student selects the correct drug and concentration.	20	
The student places the pill counting tray on the pharmacy counter with the channel to the left and the open plate in front of him or her.	1	
The student pours the medication tablets or capsules onto the tray plate.	1	
The student opens the channel cover.	1	
The student uses a spatula or tongue depressor to push groups of tablets or capsules into the channel.	1	
When the student has counted the desired amount of medication, he or she closes the channel cover. The student tilts the tray to return the unused medicine into the stock bottle.	4	
The student lifts the tray to place the channel spout into the medicine vial and transfers medication.	4	
The student places the lid on the vial and sets it on the counter.	1	
The student appropriately fills out label with prescription information.	7	
TOTAL POINTS	50	

Clinical Procedures Practicum

REMOVAL OF SUTURES

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student clearly visualizes and inspects the incision site.	10	
If there are problems with the incision site, the student informs the veterinarian. If there are no problems, the student removes the sutures.	10	
The student chooses the correct tool to remove the sutures.	10	
The student places the curved blade underneath the suture for removal and removes the suture.	15	
The student does not cause unnecessary harm or discomfort to the patient.	5	
TOTAL POINTS	50	

Clinical Procedures Practicum

ADMINISTER ORAL TABLET/CAPSULE

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
The student reads and interprets the veterinarian's order.	10	
The student selects the correct drug and concentration.	20	
The student is able to open the mouth of the animal.	5	
The student maintains control of the head or muzzle during the administration of the medication.	5	
The student uses an appropriate technique to encourage the patient to swallow.	5	
The student is able to control the animal in a manner that is adequate to administer the medication yet did no harm to the patient.	5	
TOTAL POINTS	50	