Veterinary Science

Nebraska Career Development Event Handbook and Rules for 2024-2028

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
 - 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

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.

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 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 procedure practicum portions of the event.

5. REQUIRED SUPPLIES AND EQUIPMENT

- a. Phones, tablets, electronic devices, and backpacks are <u>not</u> 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

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.

7. ANNUAL THEME

There is no annual theme or topic for this CDE. However, as of the revision year, there were several event changes from the National FFA. National qualifying teams should refer to national guidelines for preparing national level teams.

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

III. Practicums

- i. Clinical Procedure Practicum (50 POINTS)--Teams will be given four clinical procedure activities to complete, one for each member (50 points each). Fifteen to 30 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 ask participants for clarification on steps performed.
 - a. Administering Aural Medication
 - b. Administering Ophthalmic Medication
 - c. Administering an Intramuscular Injection
 - d. Administering a Subcutaneous Injection
 - e. Bandage Removal
 - f. Filling a Syringe for Injection
 - g. Fecal Flotation with Fecalyzer
 - h. Opening a Surgery Pack
 - i. Prepare a Surgical Pack for Sterilization
 - j. Surgical Site Preparation
 - k. Prescription Filling
 - I. Removal of Sutures
 - m. Administer Oral Tablets/Capsule
- II. Handling And Restraining Practicum (30 POINTS)--Teams will be given four handling/restraint activities to complete, one for each member (30 points each). Fifteen to 30 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 ask participants for clarification on steps performed.
 - a. Removing a Cat from a Cage and Placing in a Cat Bag
 - b. Applying a Cat Muzzle
 - c. Restraint of the Cat in Lateral Recumbency for Femoral Venipuncture
 - d. Restraint of the Cat for Jugular Venipuncture

- e. Restraint of the Cat for Cephalic IV Catheter Placement
- f. Applying Gauze Dog Muzzle
- g. Applying Nylon Dog Muzzle
- h. Removing Dog from Floor Level Cage to Restrain for Lateral Saphenous Venipuncture
- i. Restraint of the Small Dog for Jugular Venipuncture
- j. Restraint of the Dog for Cephalic Venipuncture
- k. Restraint of a Rabbit
- Haltering Ruminants
- m. Haltering a Horse
- n. Placing a Tail Tie
- o. Applying Elizabethan Collar
- p. Snare Restraint of the Pig

9. SCORING

Event	Individual Points	Team Points
Identification		150
Clinical Procedures Practicum ^a	50	200
Handling and Restraining Practicum ^a	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. Accuracy of the math question(s) on the written exam
 - iii. Higher Clinical Procedures Practicum
 - iv. Higher Handling and Restraining Practicum

- II. Team
 - Total team Written Exam Score
 - ii. Total team Clinical Procedures Practicum
 - iii. Total team Handling and Restraining Practicum
 - iv. Total team identification score

11. RESOURCE MATERIALS

- a. The following site it 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
- c. Past CDE materials and other resources are available by logging in to FFA.org.
- d. Small Animal Care and Management. Warren. ISBN: 978-1-4180-4105-2
- e. McCurnin's Clinical Textbook for Vet Technicians, 8th edition. ISBN 978-1-4377-2690-0
- f. Veterinary Instruments and Equipment: A Pocket Guide. Sonsthagen. ISBN: 978-0323032032
- a. Breeds Associations
 - I. American Kennel Club, http://www.akc.org/index.cfm
 - II. Cat Fanciers' Association, https://cfa.org/breeds/
 - III. American Rabbit Breeders Association, http://www.arba.net/
 - IV. Cattle Breeds, http://afs.okstate.edu/breeds/
- h. Medical Mathematics and Dosage Calculations for Veterinary Professionals. Bill, Robert. ISBN: 978- 08138263
- i. https://todaysveterinarypractice.com/
- i. atdove.org
- k. Body Condition Scores:
 - I. Cat & Dog: https://www.purinainstitute.com/centresquare/nutritional-and-clinical-assessment/purina-body-condition-system
 - II. Horse: https://ker.com/wp-content/uploads/body-condition-score-chart.pdf

12. PAST EXAMS

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.

Appendix

Appendix 1: Equipment & Materials Identification List

- 100. Anesthetic machines
- 101. Autoclave
- 102. Autoclave tape indicator
- 103. Backhaus towel clamps
- 104. Balling gun
- 105. Bandaging material Elasticon
- 106. Bandaging material roll gauze
- 107. Bandaging material vet wrap
- 108. Bands (castration or docking)
- 109. Catheter IV
- 110. Catheter Tomcat urinary
- 111. Cautery
- 112. Centrifuge
- 113. Chemical indicator strips
- 114. Dehorner Barnes
- 115. Dehorner electric
- 116. Dental/Power Float
- 117. Dental scaler
- 118. Large Animal Ear Tagger
- 119. Ear notcher
- 120. Elastrator
- 121. Electronic ID Reader
- 122. Elizabethan collar
- 123. Emasculators
- 124. Endotracheal tubes
- 125. Fecal loop
- 126. Fecalyzer
- 127. Fetal extractor calf
- 128. Forceps Allis tissue
- 129. Forceps Babcock tissue
- 130. Forceps Brown-Adson thumb
- 131. Forceps Crile
- 132. Forceps Kelly
- 133. Forceps Rat tooth thumb

- 134. Forceps —Rochester Carmalt
- 135. Hog snare
- 136. Hoof knife
- 137. Hoof rasp
- 138. IV Fluid Bag
- 139. Muzzle basket
- 140. Muzzle nylon
- 141. Needle holder Olsen-Hegar
- 142. Obstetrical chain and handle
- 143. Ophthalmoscope
- 144. Otoscope
- 145. Pig tooth nippers
- 146. Rumen magnet
- 147. Scalpel blade
- 148. Scalpel handle
- 149. Scissors Utility Bandage
- 150. Scissors Lister bandage
- 151. Scissors Mayo dissecting
- 152. Scissors Metzenbaum dissecting
- 153. Silver nitrate sticks
- 154. Snook ovariohysterectomy hook
- 155. Speculum Equine
- 156. Speculum Frick/Bovine
- 157. Cattle Handling Restraint Device
- 158. Staple remover
- 159. Stethoscope
- 160. Syringe Leur Lock
- 161. Syringe Slip Tip
- 162. Syringe automatic, multi-dose
- 163. Tattooing instruments
- 164. Thermometer
- 165. Trocar and cannula
- 166. Humane Twitch

Name correction

Added to the list (beginning 2024)

Appendix 2: Parasite/Microscope Identification List

- 200. Cat Warble (Genus Cuterebra)
- 201. Coccidia (Genus Isospora or Eimeria)
- 202. Demodectic Mite (Genus *Demodex*)
- 203. Ear Mite (Family Psoroptidae; Genus Otodectes)
- 204. Flea Tapeworm Egg (Genus Dipylidium)
- 205. Flea Tapeworm Segment (Genus Dipylidium)
- 206. Giardia (Genus Giardia)
- 207. Heartworm Adult (Genus Dirofilaria)
- 208. Heartworm Microfilaria (Genus Dirofilaria)
- 209. Hookworm Adult (Family *Ancylostomatidae*; Genus *Ancylostoma*, *Uncinaria*, *Bunostomum* or *Globocephalus*)
- 210. Hookworm Egg (Family *Ancylostomatidae*; Genus *Ancylostoma*, *Uncinaria*, *Bunostomum* or *Globocephalus*)
- 211. Horse Strongyles (Family Strongylidae; Genus Strongylus)
- 212. Liver Fluke (Class Trematoda: Genus Fasciola, Fascioloides or Dicrocoelium)
- 213. Mosquito Larva (Family Culicidae; Genus Anopheles, Culex or Aedes)
- 214. Neutrophils
- 215. Platelets

216. Mammalian red blood cell (erythrocyte)

217. Avian red blood cell (erythrocyte)

- 218. Roundworm Adult (Family Ascarididae or Toxocaridae; Genus Toxocara, Toxascaris, Ascaris, Parascaris or Neoascaris)
- 219. Roundworm Egg (Family *Ascarididae* or *Toxocaridae*; Genus *Toxocara*, *Toxascaris*, *Ascaris*, *Parascaris* or *Neoascaris*)
- 220. Sarcoptic Mite (Family Sarcoptidae; Genus Sarcoptes or Notoedres)
- 221. Taenia Tapeworm Egg (Family Taeniidae; Genus Taenia)
- 222. Taenia Tapeworm Segment (Family Taeniidae; Genus Taenia)
- 223. Tick American Dog (Family *Dermacentor*; Genus *variabilis*)
- 224. Tick Black Legged Deer (Family Ixodes; Genus scapularis)
- 225. Tick Brown Dog (Family Rhipicephalus; Genus sanguineus)
- 226. Tick Lonestar (Family Amblyomma; Genus americanum)
- 227. Whipworm Egg (Genus Trichuris)
- 228. Whipworm (Genus Trichuris)

Name correction

Appendix 3: Breed/Species Identification List

Appendix of Diced/opedies	identification List
DOGS	
Herding Group	Working Group
300. Australian Cattle Dog	342. Bernese Mountain Dog
301. Australian Shepherd	343. Boxer
302. Border Collie	344. Doberman Pinscher
303. Collie	345. Great Dane
304. German Shepherd Dog	346. Great Pyrenees
305. Old English Sheepdog	347. Mastiff
306. Pembroke Corgi	348. Newfoundland
	349. Rottweiler
Hound Group	350. Saint Bernard
307. Basset Hound	351. Siberian Husky
308. Beagle	-
309. Bloodhound	CATS
310. Dachshund	352. Abyssinian
311. Greyhound	353. American Shorthair
312. Rhodesian Ridgeback	354. Burmese
	355. Maine Coon
Non-Sporting Group	356. Manx
313. Bichon Frise	357. Persian
314. Boston Terrier	358. Ragdoll
315. Bulldog	359. Russian Blue
316. Chow Chow	360. Siamese
317. Dalmatian	361. Sphynx
318. Poodle	DIDDO
On aution of Oracus	BIRDS
Sporting Group	362. African Gray Parrot
319. Brittany Spaniel	363. Canary
320. Cocker Spaniel321. English Setter	364. Cockatiel 365. Cockatoos
322. German Shorthaired Pointer	365. Cockatoos 366. Love Birds
323. Golden Retriever	367. Macaw
324. Irish Setter	368. Parakeet
325. Labrador Retriever	369. Sun Conure
326. Weimaraner	370. Zebra Finch
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Terrier Group	REPTILES
327. Bull Terrier	371. Bearded Dragon
328. Cairn Terrier	372. Chameleon
329. Parson Russell Terrier	373. Gecko
330. Scottish Terrier	374. Iguana
331. West Highland White Terrier	375. Ball Python
- 0	376. Burmese Python
Toy Group	377. Corn Snake
332. Cavalier King Charles Spaniel	DOLUTDY.
333. Chihuahua	POULTRY
334. Miniature Pinscher	378. Chicken - Cornish
335. Papillon	379. Chicken - Leghorns
336. Pekingese 337. Pomeranian	380. Chicken - Plymouth Rock381. Chicken - Rhode Island Red
337. Pomeranian 338. Toy Poodle	381. Chicken - Rhode Island Red 382. Duck
339. Pug	383. Turkey
340. Shih Tzu	JOJ. Turkey
341. Yorkshire Terrier	
5	

SMALL MAMMALS

384. Ferret

385. Guinea Pig

386. Hamster

387. Hedgehog
388. Mouse
389. Rat

RABBITS

390. Angora

391. Californian

392. Dutch

393. English Spot

394. Holland Lop

395. Mini-Rex

396. Netherland Dwarf

397. New Zealand

DAIRY CATTLE

398. Ayrshire

399. Brown Swiss

400. Guernsey

401. Holstein

402. Jersey

BEEF CATTLE

403. Angus

404. Brahman

405. Charolais

406. Hereford

407. Shorthorn

HORSE

408. Appaloosa

Name correction

Added to the list (beginning 2024)

- 409. Arabian
- 410. Belgian
- 411. Clydesdale
- 412. Morgan
- 413. Paint
- 414. Percheron
- 415. Quarter Horse
- 416. Saddlebred
- 417. Tennessee Walking Horse
- 418. Thoroughbred

GOAT

- 419. Nubian
- 420. Angora
- 421. Boer
- 422. LaMancha

SHEEP

- 423. Columbia
- 424. Dorper
- 425. Dorset
- 426. Hampshire
- 427. Merino
- 428. Rambouillet
- 429. Southdown
- 430. Suffolk

SWINE

- 431. American Landrace
- 432. Berkshire
- 433. Chester White
- 434. Duroc
- 435. Hampshire
- 436. Yorkshire

Appendix 4: Handling and Restraint Score Cards

Handling & Restraining Practicum

REMOVING A CAT FROM A CAGE AND PLACING IN CAT BAG

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	

APPLYING A CAT MUZZLE

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	

RESTRAINT OF THE CAT IN LATERAL RECUMBENCY FOR FEMORAL VENIPUNCTURE

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	

RESTRAINT OF THE CAT FOR JUGULAR VENIPUNCTURE

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	

RESTRAINT OF THE CAT FOR CEPHALIC IV CATHETER PLACEMENT

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	

APPLYING A GAUZE DOG MUZZLE

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 & Restraining Practicum APPLYING A NYLON DOG MUZZLE

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

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 & Restraining Practicum RESTRAINT OF THE SMALL DOG FOR JUGULAR VENIPUNCTURE

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 & Restraining Practicum RESTRAINT OF THE DOG FOR CEPHALIC VENIPUNCTURE

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 & Restraining Practicum RESTRAINT OF A RABBIT

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 & Restraining Practicum HALTERING RUMINANTS

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 & Restraining Practicum HALTERING A HORSE

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 & Restraining Practicum PLACING A TAIL TIE

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 & Restraining Practicum APPLYING ELIZABETHAN COLLAR

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	

Handling & Restraining Practicum SNARE RESTRAINT OF THE PIG

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	

Appendix 5: Clinical Procedures Score Cards

Clinical Procedures Practicum

ADMINISTERING AURAL MEDICATION

Criteria	Points Possible	Points Earned
The student successfully administered the proper amount of medication into the ear canal. • 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	

ADMINISTERING OPHTHALMIC MEDICATION

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	

ADMINISTERING AN INTRAMUSCULAR INJECTION

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	

ADMINISTERING A SUBCUTANEOUS INJECTION

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	

BANDAGE REMOVAL

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	

FILLING A SYRINGE FOR INJECTION

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

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	-

OPENING A SURGERY PACK

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	

PREPARE A SURGICAL PACK FOR STERILIZATION

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	

SURGICAL SITE PREPARATION

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 reachs 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	

PRESCRIPTION FILLING

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	

REMOVAL OF SUTURES

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	

ADMINISTER ORAL TABLET/CAPSULE

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	