Purpose

The purpose of the Tennessee 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.

Objectives

Participants will demonstrate professional ethics, decision-making, business competency, communication and problem-solving skills.

Participants will demonstrate technical competency with small and large animals in the areas of:

- Anatomy and physiology
- Clinical procedures
- Identification
- Health and safety
- Medical terminology
- Veterinary math applications

Event Rules

Teams will consist of four members with all four members’ scores counting toward total team score.

DRESS CODE:

**FFA Official Dress is NOT required for this event.** Participants must wear either scrubs (top and bottoms; solid color) or polo with slacks. All participants must wear closed toe, closed heel and flat shoes (no clogs, sandals or flip-flops).

TOOLS AND EQUIPMENT:

- Equipment provided by student: pencils, non-programmable calculators, and clear, transparent clipboards
- FFA will provide the specific tools, equipment & ID sheets needed to complete practicums.
- Any participant in possession of an electronic device in the event area is subject to disqualification.
Event Rules

INDIVIDUAL ACTIVITIES

WRITTEN EXAM (100 POINTS)
The objective exam is designed to determine team members’ broad understanding of the veterinary science field. The written exam will consist of 50 questions. Forty minutes will be given for the exam. All test questions will come from the previous five years of National FFA Veterinary Science Written Exams located on FFA.ORG. A test bank of the previous five years National FFA Exams will be maintained and updated annually by FFA State Staff on the Downloads Tab of tnffa.org.

Topics for the exam may include:
- Behavior
- Disease (causes and sources, signs and clinical signs)
- Medical terminology
- Medical records
- Anatomy/physiology
- Regulations (OSHA: Federal Occupational Safety and Health Administration; GHS: Globally Harmonized System for Hazard Communication; SDS: Safety Data Sheets)
- Patient management
- Facility management
- Practice management
- Genetics
- Nutrition
- Husbandry

MATH APPLICATIONS EXAM (100 POINTS)
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.

IDENTIFICATION (100 POINTS TOTAL)
Participants will identify equipment, parasites and breeds/species for a total of 100 points (two points per item). Forty minutes will be given for this activity. Identification lists are located at the end of this handbook.
EQUIPMENT (50 POINTS)
Participants will identify pieces of equipment (actual equipment and photos). They will also need to have general knowledge about the use for each item.

PARASITES/MICROSCOPIC (30 POINTS)
Participants will identify parasites (specimen and photos) and explain the life cycles of selected parasites.
Participants will identify microscopic organisms.

BREEDS (20 POINTS)
Participants will identify breeds of small and large animals (photos).

After all individual activities are scored, only the top ten teams will participate in the team activity. All other teams will be released.

Team Activity (500 points)
Teams will conduct research using local veterinarians and veterinary resources based on the annual topic posted on the National FFA CDE webpage on FFA.ORG in November of each year. The Team Activity Topic will also be updated annually and posted on the Downloads page on tnffa.org. The team will be provided a specific scenario when they begin their team activity. They will have a total of 15 minutes to prepare their presentation. Teamwork will be assessed during the plan development time.

Teams will evaluate the information provided and prepare the questions, diagnostics and recommendations as well as explain steps and procedures for the veterinary process in their plan. Teams need to determine what aspects of veterinary medicine and roles are most important to demonstrate based on the annual topic.

After preparation the team will be required to give an oral presentation for a maximum of 15 minutes explaining decisions made by the team. All team members are expected to participate in the presentation. The team will then be required to answer questions from judges regarding the decisions reached by their team.

Resources provided for the team activity may include diagnostic information like blood work, synopsis of disease state, treatment recommendations and cost information. Props will not be allowed.
Scoring

<table>
<thead>
<tr>
<th>ACTIVITIES</th>
<th>Individual Points</th>
<th>Team Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Exam</td>
<td>100</td>
<td>400</td>
</tr>
<tr>
<td>Identification</td>
<td>100</td>
<td>400</td>
</tr>
<tr>
<td>Math Application Exam</td>
<td>100</td>
<td>400</td>
</tr>
<tr>
<td>Team Activity</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td></td>
<td>720</td>
<td>1,700</td>
</tr>
</tbody>
</table>

TIEBREAKERS

Team tiebreakers will be settled in the following order:
1. Combined individual Identification total score
2. Combined individual written exam total score

Individuals tiebreakers will be settled in the following order:
1. Combined identification score
2. Written exam score

Resources

This list of references is not intended to be all inclusive.

Other sources may be utilized, and teachers are encouraged to make use of the very best instructional materials available. Make sure to use discretion when selecting website references by only using reputable, proven sites. The following list contains references that may prove helpful during event preparation. The most current edition of resources will be used.

Past CDE materials and other resources are available by logging in to https://www.ffa.org/participate/cdes/veterinary-science
WRITTEN EXAM:

- Previous five years National Vet Science Written Exams located on FFA.ORG – A test bank will be posted on the Downloads page of tnffa.org and updated annually


- Official Guide: Maintaining and Cleaning Surgical Instruments. Stow.:
  https://www.ffa.org/SiteCollectionDocuments/cde_vetsci_guide_maintaining_clearing_surgical_instruments.pdf

  https://agrilifebookstore.org/publications_browse2.cfm?keywordid=4


- http://todaysveterinarypractice.navc.com/


- Clinical Procedures & Handling/Restraining Practicums:


    https://agrilifebookstore.org/publications_browse2.cfm?keywordid=4
IDENTIFICATION:


- American Kennel Club – http://www.akc.org/index.cfm


- American Rabbit Breeders Association – http://www.arba.net/

MATH PRACTICUM:


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

## 200 points

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>Very strong evidence of skill 5-4 points</th>
<th>Moderate evidence of skill 3-2 points</th>
<th>Weak evidence of skill 1-0 points</th>
<th>Points Earned</th>
<th>Weight</th>
<th>Total Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective listening</td>
<td>Clearly evident that all team members are listening.</td>
<td>Listening occurs but distraction is evident.</td>
<td>Not listening to each other and/or talking over each other.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Oral communication</td>
<td>Clearly evident that all team members are discussing the topic.</td>
<td>Communication occurs but side conversations are occurring or two to three members dominating.</td>
<td>One member dominating conversation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstrated cooperation</td>
<td>Clearly all team members completing tasks, sharing written and oral solutions.</td>
<td>Tasks primarily completed by two to three members, other members assist occasionally.</td>
<td>Tasks primarily completed by one member, other members contributing only slightly.</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>Clearly all team members respected the input of other team members.</td>
<td>Most team members respected the input of other team members.</td>
<td>The team members did not respect the input of other team members.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participated in the team preparation</td>
<td>Clearly all team members are engaged, attentive, and making notes for the full term of event.</td>
<td>Members are engaged and attentive with two to three making notes, participation fades over time.</td>
<td>One to two members form the primary team, other members participate occasionally early, fade over time.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Clearly all team members demonstrate efficient use of his/her time in comprising the plan.</td>
<td>Most team members demonstrate efficient use of his/her time in comprising the plan.</td>
<td>One to two team members demonstrate efficient use of his/her time in comprising the plan.</td>
<td></td>
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</tr>
</tbody>
</table>
### Team Activity Presentation Rubric

#### 300 points

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>Very strong evidence of skill (5-4 points)</th>
<th>Moderate evidence of skill (3-2 points)</th>
<th>Weak evidence of skill (1-0 points)</th>
<th>Points Earned</th>
<th>Weight</th>
<th>Total Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-verbal – 50 points</strong></td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>
| **Attention (eye contact)** | Eye contact constantly used as an effective connection.  
Constantly looks at the entire audience (90-100 percent of the time). | Eye contact is mostly effective and consistent.  
Mostly looks around the audience (60-80 percent of the time). | Eye contact does not always allow connection with the speaker.  
Occasionally looks at someone or some groups (less than 50 percent of the time). |                |         |             |
| **Mannerisms**            | Does not have distracting mannerisms that affect effectiveness.                         | Sometimes has distracting mannerisms that pull from the presentation.             | Has mannerisms that pull from the effectiveness of the presentation.             |                |         |             |
| **Gestures**              | Gestures are purposeful and effective.  
Hand motions are expressive, and used to emphasize talking points. Confident with positive body language. | Usually uses purposeful gestures.  
Hands are sometimes used to express or emphasize.  
Occasionally slumps; sometimes negative body language. | Occasionally gestures are used effectively.  
Hands are not used to emphasize talking points; hand motions are sometimes distracting.  
Lacks positive distracting. Lacks positive body language; slumps. |                |         |             |
| **Oral – 50 points**      |                                                                                         |                                                                                   |                                                                                  |                |         |             |
| **Speaking without hesitation** | Speaks very articulately without hesitation.  
Never has the need for unnecessary pauses or hesitation when speaking. | Speaks articulately, but sometimes hesitates.  
Occasionally has the need for a long pause or moderate hesitation when speaking. | Speaks articulately, but frequently hesitates.  
Frequently hesitates or has long, awkward pauses while speaking. |                |         |             |
| **Tone**                  | Appropriate tone is consistent.  
Speaks at the right pace to be clear.  
Pronunciation of words is very clear and intent is apparent. | Appropriate tone is usually consistent.  
Speaks at the right pace most of the time, but shows some nervousness.  
Pronunciation of words is usually clear, sometimes vague. | Has difficulty using an appropriate tone.  
Pace is too fast; nervous.  
Pronunciation of words is difficult to understand; unclear. |                |         |             |
| **All team members participated** | All team members took an active role in the presentation. | Three team members took an active role in the presentation. | Two or less team members took an active role in the presentation. |                |         |             |

Notes:
- **X4** no credit
- **X3** 2 points
- **X2** 1 point
- **X5** no credit
<table>
<thead>
<tr>
<th>Content – 200 points</th>
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<tbody>
<tr>
<td><strong>Veterinary topic research</strong></td>
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<tr>
<td><strong>Demonstrates knowledge of topic</strong></td>
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<tr>
<td><strong>Q&amp;A: Knowledge of the topic</strong></td>
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**TOTAL**