VETERINARY SCIENCE

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.

OBJECTIVE
1. Participants will demonstrate professional ethics, decision-making, communication and problem-solving skills.
2. Participants will demonstrate technical competency with small and large animals in the areas of:
   1. Anatomy and physiology
   2. Clinical procedures
   3. Identification
   4. Health and safety
   5. Medical terminology

AGRICULTURE, FOOD AND NATURAL RESOURCES (AFNR) CAREER CLUSTER CONTENT STANDARDS
With the recommendation of the National FFA Board of Directors, all national FFA programs have incorporated these standards to guide the direction and content of program materials and activities. Refer to Appendix A in this chapter of the handbook for a complete list of the measurable activities that participants will carry out in this event. For details about the incorporation of AFNR standards, refer to the Introduction chapter of the CDE handbook.

EVENT RULES
1. Each FFA chapter will be able to compete with one team consisting of five members with the top four members’ scores counting toward total team score.
2. Dress code: Participants will wear FFA Official Dress for the event.
3. Tools and Equipment:
   a. Contestants may have the following equipment: pens, pencils, calculators, and clipboards. Paper will be provided by the contest coordinator.
   b. Contest coordinator will provide the specific tools and equipment needed to complete practicums.
   c. Due to sanitation reasons, some items that may be needed in the event (such as stethoscopes) will need to be provided by the participant or their chapter. Teams will be provided a list of specific items needed for a specific year based on the event activities.
4. Any participant in possession of an electronic device in the event area is subject to disqualification.

EVENT FORMAT
A. Individual Activities
1. 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, consisting of questions from the last three years of national veterinary science exams.

2. Scenario Questions - 50 points
   The questions associated with the scenarios will allow students to utilize critical thinking and problem-solving skills. Thirty minutes total will be allowed to complete the scenario question. Participants will be given one scenario based on the topic rotation listed below. This state CDE will follow the topic rotation list outlined by the National FFA Veterinary Science CDE.
   • 2015: Behavior/husbandry
   • 2016: Future of veterinary profession and welfare/ethics
   • 2017: Clinical/wellness
   • 2018: Communication/client education

   Sample Scenario Question:
   Write a persuasive letter on the issue below to portray your point of view using the provided resource.
In 2006 a nationwide ruling was established banning the slaughter of horses. Since the ruling there have been serious growing concerns with the welfare and high number of unwanted/neglected horses in the United States. Currently several states are considering reversing the 2006 ban. What are the pros and cons of the original ban and the proposal to reverse it?


3. Identification - 150 points total
Participants will identify equipment, parasites and breeds/species for a total of 100 points (2 points per item). Fifty minutes will be given for this activity. Identification lists are located at the end of this handbook, provided by the National FFA Veterinary Science CDE.

a. Equipment – 50 points
Participants will identify ten pieces of equipment (actual equipment and photos). Items will be selected as follows:
- 2014-15 – Equipment and materials #142 – 183
- 2015-16 – Equipment and materials #184- 227
- 2016-17 – Equipment and materials #100-141
- Rotation will start over every three years.

b. Parasites – 50 points
Participants will identify ten parasites (specimen and photos) and/or be able to explain/identify the stages of life cycles of selected parasites.

c. Breeds – 50 points
Participants will identify 10 breeds of animals (photos). Rotation of animal breed identification will be as follows:
- 2014-15 – #500-566 (cats, rabbits, birds, small mammals, reptiles, poultry, and other)
- 2015-16 - #600-654 (dairy cattle, beef cattle, swine, horse, goat, and sheep)
- 2016-17 – #400-475 (All dogs)

4. Practicums - 150 points total
a. Math Applications Practicum – 50 points (5 points/question)
There will be ten questions and participants will have 50 minutes to complete the entire math application practicum. Questions may include conversions, dose calculations, dilutions, cost calculations and invoices.

Example:
Sophie, a golden retriever, and her owner have just moved from out-of-state and are reestablishing veterinarian relations at your clinic. Sophie’s owner has provided you with her health records from their previous veterinarian. Sophie had been prescribed a diet plan by the previous veterinarian and had been coming into the clinic for weekly weight checks. Sophie’s owner would like to continue the weekly checks with you. You weigh Sophie and record her weight as 19 kg. The owner would like you to tell her how much weight Sophie has lost. Sophie’s last recorded weight was 43.2 lb. How many pounds did Sophie lose since the last weighing? ANSWER: Sophie has lost 1.4 lb. since the last recorded weighing.

b. Handling and Restraining Practicum – 50 points (25 points each)
Only in Even Numbered Years
Participants will be given four handling/restraint activities to complete (25 points each). Fifteen to thirty minutes will be allotted for this section depending on the activities selected each year. Participants are expected to talk through the handling and restraining steps to a judge as they are being scored. Judges may speak and ask questions to the participant at the end of each activity, if time allows. All handling and restraining scorecards can be
found at the end of this handbook.

c. Clinical Procedure Practicum – 50 points (25 points each)

Only in Odd Numbered Years

Participants will be given four clinical procedure activities to complete (25 points each). Fifteen to thirty minutes will be allotted for this section depending on the activities selected each year. Participants are expected to talk through the clinical procedure steps to a judge as they are being scored. Judges may speak and ask questions to the participant at the end of each activity, if time allows. All clinical procedure scorecards can be found at the end of this handbook.

B. Team Activity - 300 points

Teams will conduct research using local veterinarians and veterinary resources based on the annual topic. In a 15 minute presentation, teams will demonstrate the different roles of the veterinary team, as well as explain steps and procedures for the veterinary process to the judges. Judges will be allotted five minutes of question/answer time after each presentation. The potential roles to be addressed in the team activity are listed below. Teams need to determine what roles are most important to demonstrate based on the annual topic. Veterinary team roles may include, but are not limited to:

- Veterinary technician
- Veterinarian
- Veterinary assistant
- Receptionist
- Farm manager
- Owner/client
- Kennel/stable assistant

The presentation can be creative in nature and teams may include props, but all contestants must remain in official dress and must be able to set up in 5 minutes and tear down in 3 minutes. PowerPoint presentations will not be utilized in the team activity. Advisors will not be allowed to assist during any portion of the team activity. See team activity rubric at the end of this handbook. Rubric from the National CDE Event will be used, but points will be cut in half.

Annual team activity topics to be followed from the National CDE Event:

- 2014-15: Senior dog wellness visit
- 2015-16: Cow with salmonellosis
- 2016-17: Dairy goat with caprine arthritis encephalitis (CAE)

EVENT SCORING

<table>
<thead>
<tr>
<th>Event</th>
<th>Individual Points</th>
<th>Team Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Exam (2 pts/question)</td>
<td>100</td>
<td>400</td>
</tr>
<tr>
<td>Scenario Questions</td>
<td>50</td>
<td>200</td>
</tr>
<tr>
<td>Identification</td>
<td>150</td>
<td>600</td>
</tr>
<tr>
<td>Math Application Practicum</td>
<td>100</td>
<td>400</td>
</tr>
<tr>
<td>Handling and Restraining or Clinical Practicum (25 pts/activity)</td>
<td>50</td>
<td>200</td>
</tr>
<tr>
<td>Team Activity</td>
<td></td>
<td>300</td>
</tr>
<tr>
<td>Maximum Total Points:</td>
<td>500</td>
<td>2300</td>
</tr>
</tbody>
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TIEBREAKERS

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

B. Individuals tiebreakers will be settled in the following order:
   1. Combined practicum score
   2. Written exam score
AWARDS
Awards will be presented to individuals and teams based upon their rankings at the awards ceremony.

RESOURCES
Please refer to the National FFA Veterinary Science CDE handbook.