

# Illinois Association of Vocational Agriculture Teachers Veterinary Science CDE

Contest Superintendent - Lisa Oellerich, Scales Mound

IAVAT CDE Committee Member - Brett Sorensen, Clifton Central

Host - Bill Johnson, Joliet Junior College Agriculture Professor

Mary Cwikla, Weitendorf Ag Center Facility Manager

Luke Allen, FCAE District 2 Program Advisor

## Purpose of the Event

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.

## Objectives

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:
  - a. Anatomy and physiology
  - b. Clinical procedures
  - c. Identification
  - d. Health and safety
  - e. Medical terminology

## **A. General Information**

1. **Team:** A team shall consist of *four* (4) members. All four scores will count toward the team total. A school may compete with less than four participants, but is only eligible for individual awards.
2. **Placings/Scoring:** Official ring placings and reasons will be given immediately following completion of the event.
3. **Scorecards:** The Scantron card used in the event will be posted on iavat.org
4. **Miscellaneous:**
  - a. Participants may use Non-Scientific (Simple calculator), battery operated calculators if they provide them.
  - b. Calculators may not be shared.
  - c. Participants should have clipboards and #2 pencils for use during the CDE.
5. **Additional Information:**
  - a. Refer to the current National FFA Career Development Events manual.
  - b. Refer to the "General Rules" section for the current year for information concerning Entry Fees, Registration and Location of the event.

## **B. Career Development Event Format**

The career development event shall consist of five parts: 1) Written Exam - 50 points, 2) Scenario Questions - 50 points, 3) Identification - 90 points, 4) Math Practicum - 100 points and 5) Handling/Clinical Practicums - 100 points.

## C. Career Development Events Divisions

### 1. Written Exam: (50 points)

The written exam is designed to determine team members' broad understanding of the veterinary science field.

a. Topics for the exam may include:

- Behavior
- Disease (causes and sources, signs and symptoms)
- Medical terminology
- Medical records
- Anatomy/physiology
- Regulations (federal OSHA, MSDS)
- Patient management
- Facility management
- Genetics
- Nutrition
- Husbandry

b. Team members will work individually.

c. The test will consist of 25 multiple-choice or True/False questions.

d. Thirty minutes will be allotted to complete the Written Exam, with each question worth two points for a total of 50 points.

### 2. Scenario Questions:

The questions associated with the scenarios will allow students to utilize critical thinking and problem-solving skills. Participants will be given two scenarios based on the topic rotation listed below.

- 2016: Future of veterinary profession and welfare/ethics
- 2017: Clinical/wellness
- 2018 (tentative): Communication/client education

Thirty minutes will be given for this activity with each scenario worth 25 points for a total of 50 points.

#### 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?*

Resource: [http://www.avma.org/issues/animal\\_welfare/unwanted\\_horses\\_faq.asp](http://www.avma.org/issues/animal_welfare/unwanted_horses_faq.asp)

### 3. Identification: (90 points total)

Participants will identify equipment, parasites and breeds/species for a total of 90 points (3 points per item). Thirty minutes will be given for this activity. Identification lists are located [on the iavat.org Career Development Events tab](#) and will be provided to students for this portion of the event.

- a. 10 pieces of equipment (actual equipment and/or photos) - 30 points
- b. 10 parasites (actual specimens and/or photos) - 30 points
- c. 10 breeds of small or large animals (photos) - 30 points

### 4. Math Practicum: (100 points)

The participant will complete 20 multiple choice practicum questions. Participants will have 30 minutes to complete the entire math application practicum. Questions may include conversions, dose calculations, dilutions, cost calculations and invoices. A list of common conversions will be provided to each student for this portion of the event. Thirty minutes will be given for this activity with each practicum worth 5 points for a total of 100 points.

Sample Math Practicum:

*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.*

**5. Handling and Restraining/Clinical Procedure Practicums: (100 points)**

Participants will be given four handling and restraining/clinical procedure activities to complete (25 points each). Fifteen minutes will be allotted for each practicum. Participants are expected to talk through the handling and restraining/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. Sample practicums may include, but are not limited to:

Administering Aural Medication

Administering Ophthalmic Medication

Administering an Intramuscular Injection

Administering a Subcutaneous Injection

Bandage Removal

Filling a Syringe for Injection

Fecal Flotation with Fecalyzer

Opening a Surgery Pack

Prepare a Surgical Pack for Sterilization

Surgical Site Preparation

Prescription Filling

Removal of Sutures

Administer Oral Tablet/Capsule

Removing a Cat from a Cage and Placing in a Cat Bag

Applying a Cat Muzzle

Restraint of the Cat in Lateral Recumbency for Femoral Venipuncture

Restraint of the Cat for Jugular Venipuncture

Restraint of the Cat for Cephalic IV Catheter Placement

Applying a Gauze Dog Muzzle

Applying a Nylon Dog Muzzle

Removing a Dog from a Floor Level Cage to Restrain for Lateral Saphenous Venipuncture

Restraint of the Small Dog for Jugular Venipuncture

Restraint of the Dog for Cephalic Venipuncture

Restraint of a Rabbit

Haltering Ruminants

Haltering a Horse  
 Placing a Tail Tie  
 Applying Elizabethan Collar  
 Snare Restraint of the Pig

The clinical procedure/handling & restraining scorecards can be found [on the iavat.org](http://www.iavat.org)  
[Career Development Events tab](#)

#### E. Recommended References

##### Written Exam:

Small Animal Care and Management. Warren. ISBN: 978-1-4180-4105-2

An Illustrated Guide to Veterinary Medical Terminology. Romich. ISBN: 978-1-4354-2012-0

Official Guide: Maintaining and Cleaning Surgical Instruments. Stow. Provided free of charge by the program or available on-line at: <http://www.spectrumsurgical.com>

Veterinary Science: Preparatory Training for the Veterinary Assistant. Faries. ISBN: 978-0-9849115-0-9. Order online:

[https://agrillifebookstore.org/publications\\_browse2.cfm?keywordid=4](https://agrillifebookstore.org/publications_browse2.cfm?keywordid=4)

Introduction to Veterinary Science. Lawhead, Baker. ISBN: 978-1-4283-1225-8

##### Identification:

Veterinary Instruments and Equipment: A Pocket Guide. Sonsthagen. ISBN: 978-0323032032

<http://spectrumveterinaryinstruments.com/surgical-instrument-flash-cards.html>

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

Cat Fanciers' Association - <http://www.cfa.org/client/breeds.aspx>

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

##### Math Practicum:

Medical Mathematics and Dosage Calculations for Veterinary Professionals. Bill, Robert. ISBN: 978-08138263

##### Clinical Procedures & Handling/Restraining Practicums:

Veterinary Assisting: Fundamentals and Applications. Vanhorn, Clark. ISBN: 978-1-4354-5387-6

Small Animal Surgical Nursing: Skills and Concepts. Busch. ISBN: 978-0323030632

Manual of Clinical Procedures in Dogs, Cats, Rabbits & Rodents. Crow, Walshaw, Boyle. ISBN: 978-0813813042

Restraint and Handling for Veterinary Technicians and Assistants. Ballard, Rockett. ISBN: 978-1-4354-5358-6