



## **VETERINARY SCIENCE Career Development Event** This is a Skills CDE

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## AG SKILLS CAREER DEVELOPMENT EVENT GENERAL POLICIES, RULES, RESULTS AND STANDARDS

## \*Violations of any of the following rules may be grounds for the disqualification of the participants.

## I. Board Policies

The following board policies (<u>http://www.iowaffa.com/ffaboardpolicies.aspx</u>) apply directly or in part to Skills CDEs:

- Board Policy #2: Changes in Judging Event Answer Keys
- Board Policy #3: Changes to Judging Event Results
- Board Policy #11: Substitution of Team Members
- Board Policy #25: Advancement of Teams to National FFA Competition
- Board Policy #27: Use of Electronic Storage/Transmission Devices

## II. Eligibly of Chapters and Participants

- 1. Each state event is open to all FFA chapters in good standing with the Iowa FFA Association. (Exception: Soils Career Development Event is open to the top five teams from each district competition.)
- 2. Local FFA advisors or their designee entering teams in the state event must register their intent to have a team on Iowa FFA On-Line (<u>http://anfmp01.dmacc.edu/fmi/webd#</u>) by the due dates and registration fees listed below:
  - a. Before 14 days prior to the event
- No Charge \$50.00
- b. Between 14 days prior and day of the event \$50.00An invoice will be sent to the chapter for the appropriate entry fees at the end of the season.
- 3. A chapter may enter a separate team in each event held on a particular day. However, no member may participate in more than one Ag Skills Career Development Event on a particular day.
- 4. After an FFA Advisor registers the chapter's intent to enter a team, the names of the team members are expected to be entered on the Iowa FFA On-Line (<u>http://anfmp01.dmacc.edu/fmi/webd#</u>) by noon three days prior to the event. Any member not listed on Iowa FFA On-Line will need to be registered as an FFA member using the National FFA MyFFA Account (<u>https://www.ffa.org</u>). Changes to online entries may be made the day of the event. State and National FFA Dues will be invoiced in accordance with Iowa FFA Association policies and by-laws.
- 5. A participant, at the time of his/her participation in the state event and selection as a national team member, must:
  - a. Be a current bona fide dues paying FFA member in good standing with the local chapter, state FFA Association and the National FFA Organization at the time of the career development event in which he/she participates.
  - b. Be a middle school or high school FFA member, (a graduating senior is considered eligible to compete in state and national career development events up to and including their first national convention following graduation). Middle school refers to students in grades 7-8 and high school refers to students in grades 9-12.
  - c. Have been enrolled in high school Agricultural Education during the current/most recent school year with the following exceptions: Meats, Livestock, Dairy Cattle and Milk Quality & Products-must have been enrolled the previous school year or be in grades 8-12 for the current year.
  - d. Currently be an active FFA member of the chapter making entry into the event.
- 6. A member may not participate in both a state 4-H and state FFA Career Development Event when said events are held on the same day.
- 7. Participation in one Ag Skills Career Development Event of its type will not exclude an active FFA member from participating in the future Ag Skills Career Development Event, if the participant still qualifies as a middle school or high school FFA member (Rule 5b) providing he/she was not on a state championship FFA CDE team or a national FFA participant in the said event.
- 8. No student may participate in more than one Career Development Event each year at the national level.

9. For the Soils Career Development Event, each district FFA advisor must email all results including a list of participants for each of the top five teams to the State FFA Executive Director within one business day of the district event.

### **III. Event Room Conditions**

- 10. Accommodations for participants can be made upon request of the FFA Advisor. The accommodation form must be submitted no less than 14 days prior to the respective event.
- 11. Any communication, verbal or non-verbal between participants during a career development event will be sufficient cause to eliminate the team member involved from the career development event. The only exception to this would be communication between team members during the team activity portion of a given career development event.
- 12. Any assistance given to a team member from any source other than the career development event officials or assistants will be sufficient cause to eliminate the team from the career development event.
- 13. No extra FFA members or other persons are permitted to view the state event until the completion of the event. The only people allowed in the event area during the event are participants and designated event workers. Observers and FFA advisors who are not working with the event will not be permitted in the event area while the event is in progress. The following are exceptions to this rule: the presentation portions of the Marketing Plan CDE and Ag Communications CDE at the Iowa FFA Leadership Conference.

## IV. Participant Assignments

- 14. Each participant will be given an individual ID number by which he/she will be designated throughout the event. Contestant badges with identification numbers may be issued.
- 15. Teams will be divided into groups for individual activities. When possible, groups will be assigned to avoid having two participants on the same team in the same group.
- 16. Each participant will work on an individual basis throughout the event except during the FFA chapter team activity. Each team will submit one score card or product per team for the team activity.

## V. Equipment and Dress Code

- 17. Participants are urged to bring and use clipboards during events to facilitate the holding of placing and grading cards. The clipboards are to be clean and free of markings. A few sheets of blank paper will be permitted for taking notes and recording results.
- 18. Calculators may be used with the Career Development Events. They must be battery or solar operated, non-programmable and silent, unless otherwise listed in the specific Career Development Event rules.
- 19. Items needed for specific phases of a Career Development Event will be noted under their specific rules.
- 20. Participants are expected to observe the National FFA Code of Ethics and the Proper Use of the FFA Jacket during the career development events found in the Official FFA Manual (https://www.ffa.org/about/who-we-are/official-manual).
- 21. Official FFA dress is expected for all participants when appropriate. If official dress is not appropriate, official casual dress should be worn. Official casual dress shall consist of 1) FFA t-shirt or polo shirt and 2) khaki or nice denim pants or shorts.

### VI. Event Results

- 22. In the event that ALL participants' scores are incorrect the board reserves the right to correct the results.
- 23. Each FFA advisor will receive the judging cards, score cards, answer sheets and results following a career development event and the presentation of awards. FFA advisors are not permitted to pick up event packets until after the awards presentation.

### VII.AFNR Career Cluster Content Standards

AFNR Content Standards are specifically outlined within each respective Skills CDE.

## Vet Science

## 2020 Chairperson: Ben Booth, Manning

Coordinator: Sarah Kolb, Iowa State University

Committee Personnel: Brittany Elmquist, Audubon; Larissa Rupnow, Lake View; Eric Kumm, Paullina

### I. <u>Overview</u>

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.

- 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 areas of:
  - 1. Anatomy and physiology
  - 2. Clinical procedures
  - 3. Identification
  - 4. Health and safety
  - 5. Medical terminology

#### II. AFNR Content Standards

**AS.06** *Standard*: Classify, evaluate, select and manage animals based on anatomical and physiological characteristics.

**AS.06.02** *Indicator*: Apply principles of comparative anatomy and physiology to uses within various animal systems.

AS.07 *Standard*: Apply principles of effective animal health care.

AS.07.01 *Indicator*: Design programs to prevent animal diseases, parasites and other disorders and ensure animal welfare.

**AS.07.02** *Indicator*: Analyze biosecurity measures utilized to protect the welfare of animals on a local, state, national, and global level.

**AS.02** *Indicator*: Utilize best-practice protocols based upon animal behaviors for animal husbandry and welfare.

AS.02.01 *Indicator*: Demonstrate management techniques that ensure animal welfare.

### III. Event Rules

- A. The Iowa FFA Veterinary Science Career Development Event will be limited to one team per chapter.
- B. Teams will consist of four members with all four members' scores counting toward total team score.
- C. Each member of the team will participate in both the individual online exam and in the production of the practicum video.

#### IV. Tools and Equipment

- A. Computers with Internet access to take the online test, submit the written scenario response, and post practicum video.
- B. High Quality Video camera to record practicum.
- C. An area to practice and record practicum. It is recommended to work with a local Veterinarian Office.
- D. A YouTube account to post final practicum video for judging purposes.
- E. Basic Veterinarian Equipment may be needed depending on the tools needed for practicum.

#### V. Event Format

- A. Individual Activity
  - 1. Written Exam 50 points

The objective, multiple-choice exam is designed to determine team members' broad understanding of the veterinary science field. The written exam will consist of 50 multiple-choice questions. <u>The online exam must be proctored, and participants must take the exam at the same time. Exams taken at greater than 5 minutes apart among team members will result in zero points given for this portion of the event.</u> See sample questions below. Sixty minutes will be given for the exam. Topics for the 2019 exam may include:

- a. Animal Behavior and Handling
- b. Medical terminology
- c. Medical records
- d. Regulations (federal OSHA, MSDS)
- e. Patient and Facility management
- f. Genetics
- g. Math Applications
- 2. Specific Topics

CDE AREA	2020	2021	2022	2023	2024
Disease (causes and	Cattle	Swine	Sheep &	Small Animals	Horse
sources, signs and			Goats	(Cats, Dogs,	
symptoms)				and Rabbits)	
Anatomy/Physiology	Swine	Small Animals	Cattle	Horse	Sheep &
		(Cats, Dogs,			Goats
		and Rabbits)			
Identification of	Sheep & Goats	Horse	Swine	Cattle	Small Animals
equipment, parasites,					(Cats, Dogs,
and breeds of					and Rabbits)

- B. Team Activity 100 points
  - 1. Clinical Procedure Practicum

Teams will conduct research using local veterinarians and veterinary resources based on the annual topic. Teams then will create a video that will show the proper techniques for the clinical procedure topic. Participants are expected to talk or narrate through the clinical procedure steps for judges to score the practicum. The video should be creative in nature and teams should use all necessary equipment or props to com1plete the clinical procedure. All videos should have an introduction and also include sponsor recognition either at the beginning or the end of the video. All clinical procedure scorecards can be found at the end of this handbook. All team members must participate in the production of the video. Some roles members might play in the production of this video are but not limited to:

- a. Veterinary technician
- b. Veterinarian
- c. Veterinary assistant
- d. Videographer
- e. Narrator
- f. Video Editor

Teams can select one Clinical Procedure Practicum topic from the following choices in the respective year below:

2020	2021	2022
Administering an Aural	Administering Ophthalmic	Administering Intramuscular
Medication	Medication	Injection
Administering a Subcutaneous Injection	Bandage Removal	Filling a Syringe for Injection
Fecal Floatation with Fecalizer	Opening a Surgery Pack	Prepare a Surgical Pack for Sterilization
Surgical Site Preparation	Prescription Filling	Removal of Sutures
Administer and Aural Tablet		

### C. Written Scenario – 100 points

- 1. The questions associated with the scenarios will allow the students to utilize critical thinking and problem solving skills. Participants will be given a scenario to respond to and submit the response on-line.
- 2. Sample scenario question: Write a persuasive letter on the issue below and 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: <u>https://www.avma.org/KB/Resources/FAQs/Pages/Frequently-asked-questions-about-unwanted-horse-and-horse-slaughter.aspx</u>

#### VI. Event 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. The following list contains references that may prove helpful during event preparation.

- A. Books
  - 1. Veterinary Assisting: Fundamentals and Applications. Vanhorn, Clark. ISBN: 978-1-4354- 5387-6
  - 2. Mccurnin's Clinical Textbook for Veterinary Technicians. McCurnin, Bassert. ISBN: 978-1416057000
  - 3. Small Animal Surgical Nursing: Skills and Concepts. Busch. ISBN: 978-0323030632
  - Large Animal Clinical Procedures for Veterinary Technicians. Holtgrew-Bohling. ISBN: 978-0- 323-07732-3
  - 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
  - 7. Small Animal Care and Management. Warren. ISBN: 978-1-4180-4105-2
  - 8. Exotic Animal Care and Management. Judah, Nuttall. ISBN: 978-1-4180-4198-4
  - 9. An Illustrated Guide to Veterinary Medical Terminology. Romich. ISBN: 978-1-4354-2012-0
  - 10. Veterinary Instruments and Equipment: A Pocket Guide. Sonsthagen. ISBN: 978-0323032032
  - 11. Official Guide: Maintaining and Cleaning Surgical Instruments. Stow. Provided free of charge by the program or available on-line at: <u>http://www.spectrumsurgical.com</u>
  - 12. Veterinary Science: Preparatory Training for the Veterinary Assistant. Faries. ISBN: 978-0- 9849115-0-9. Order online: https://agrilifebookstore.org/publications\_browse2.cfm?keywordid=4
- B. Websites
  - 1. American Kennel Club http://www.akc.org/index.cfm
  - 2. Cat Fanciers' Association http://www.cfa.org/client/breeds.aspx
  - 3. American Rabbit Breeders Association <u>http://www.arba.net/</u>
  - 4. OSHA <u>http://www.safetyvet.com/osha/oshamain.htm</u>

## VII. Scoring and Ranking of Teams and Individuals

Phase	Individual Points	Team Points
Written Exam (1/2 point per question)	25	100
Written Scenario Response		100
Clinical Procedure Video		100
Total Points Possible	25	300

Team tiebreakers will be settled in the following order:

- A. Clinical Procedure Video Score
- B. Combined individual written exam total score

## VIII. <u>Awards</u>

Awards Sponsored through the Iowa FFA Foundation			
Champion Team	Cash Award for Travel to National Convention		
Reserve Champion Team	Plaque		
Top 10 Teams	Rosettes		
Members of Top 10 Teams	Rosettes		
Practicums Top Individual Each Area (4)	Plaques		
Practicums Top Team	Plaque		
Media Proposal Top Team	Plaques		
Media Presentation Top Team	Plaques		
All Teams/Individuals	Certificates		

### All awards are subject to available sponsorship.

## IX. Event Materials

- A. Written Scenario
- B. Written Scenario Scorecard
- C. Clinical Procedure Scorecards
- D. Video Scoring Rubric

### 2020 FFA Veterinary Science CDE Written Scenario

In December 2019, St. Louis, Missouri became the first city in the Midwest to institute a ban on declawing cats, a procedure known as onychectomy. Onychectomies are illegal in England, Italy, Germany, Norway, Sweden, Ireland, Spain, New Zealand and Scotland, among many other countries. Eight cities in California and the entire state of New York have already instituted cat declaw banning legislation, and many other U.S. cities and states are considering following suit.

Research the reasoning behind legislation to ban onychectomies. Do you think Iowa should institute a ban on elective declaw procedures? Write a letter to your legislature. Explain how an onychectomy is performed and common reasons that an owner may elect to declaw their cat. Share your thoughts on whether declawing cats should be banned in the state of Iowa. Provide a minimum of two alternative options to declawing cats and one example of when an onychectomy may be medically necessary.



## **Current Events Rubric**

100 points

NAME MEMBER NUMBER CHAPTER STATE Moderate evidence Very strong evidence Strong evidence **Points** Total of skill is present of skill is present of skill is not present **INDICATOR** Weight Earned Score 5-4 points 3-2 points 1-0 points WRITTEN COMMUNICATION Spelling and grammar Spelling/ Spelling and grammar are Spelling and grammar are extremely high quality. are adequate. less than adequate. grammar (sentence • Two or fewer spelling Three to five spelling • Six or more spelling structure, verb Χ1 errors are present. errors are present. errors are present. agreement, etc.) • Two or fewer grammar • Six or more grammar Three to five errors are present. grammar errors are errors are present. present. Communicates ideas Communicates ideas Message Communicates ideas extremely clearly as well as clearly and concisely, and clearly, but message is difficult to understand. extremely focused. Thoughts message is interesting are very interesting and and understandable. None of the main understandable. ideas are supported by Most of the main • All main ideas are ideas are supported sufficient details. supported by clear and by sufficient details. Little to no organization X 3 vivid details. Good organization is present and is · Clearly organized and with few statements sometimes awkward out of place or concise by remaining on and lacking target, is completely lacking in clear construction. focused with obvious construction. construction and strong introduction, body and conclusion layout. Writing style is selectively Thought was given to Writing style does not Writing style the intended audience, appropriate for the intended show intent to connect audience. and the style reflects the with different types of purpose for audiences, style is more • The style chosen has communicating with for a generic reader. Χ1 obviously been well that audience. thought-out based on the Some language used specific audience. • Most language is might be confusing for appropriate for the some audiences intended audience.

#### Veterinary Science

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### Breed/Species Identification List continued

INDICATOR	Very strong evidence of skill is present 5-4 points	Moderate evidence of skill is present 3-2 points	Strong evidence of skill is not present 1-0 points	Points Earned	Weight	Total Score
WRITTEN C	ONTENT					
Subject knowledge	Covers topic in-depth with details and examples. • Subject knowledge is excellent.	Includes essential knowledge about the topic. • Subject knowledge appears to be good.	Includes essential information about the topic but there are one to two factual errors.		X 6	
Critical thinking/ problem- solving skills	<ul> <li>Uses general methods, in an orderly manner, for finding solutions to specific problems.</li> <li>Evaluates evidence and assesses conclusions.</li> <li>Develops and defends a reasonable position or argument.</li> </ul>	<ul> <li>Uses limited critical thinking skills in determining solutions to problems.</li> <li>Develops moderate defense to conclusion for position or argument.</li> </ul>	Uses weak critical thinking skills in determining solutions to problems. • Develops weak defense to conclusion for position or argument.		X 6	
Inductive reasoning skills	<ul> <li>Establishes a logical, systematic process of achieving certain ends with accuracy and efficiency.</li> <li>Gathers together particular observations in the form of premises.</li> <li>Moves from specific premises to a general conclusion.</li> </ul>	<ul> <li>Establishes a shallow reasoning process of achieving certain ends.</li> <li>Gathers together limited observations in the form of premises.</li> <li>Moves from incomplete specific premises to a general conclusion.</li> </ul>	Establishes an inadequate reasoning process of achieving certain ends. • Incompletely gathers observations in the form of specific premises. • Inadequately formulates a general conclusion.		Х 3	

TOTAL POINTS

#### ADMINISTERING AURAL MEDICATION

Criteria	Points Possible	Points Earned
<ul> <li>The student successfully administered the proper amount of medication into the ear canal.</li> <li>Ear pinna held upright</li> <li>Correct amount of medication was administered without contamination</li> </ul>	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 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	

#### 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	

#### 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	

#### 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	