MT HOSA Vet Science

Event Category: Health Professions.....

Dress Code: Attire appropriate to the occupational area or business casual	**Round One:** 50 Q test (60 minutes)	**Digital Upload:** Yes, mystery skills video during Jan 18- Feb 12 window
Solo Event: 1 competitor	**Round Two:** Skill(s) assessment	

Event Summary

Veterinary Science allows members to gain the knowledge and skills required for diagnosing and treating animals. This competitive event consists of two rounds. Round One is a written, multiple-choice test, and the top-scoring competitors advance to Round Two for the skills assessment. This event aims to inspire members to learn more about the field of veterinary care.

General Event Information

Competitors Must Provide	• Non-Latex Exam Gloves HOSA Conference Staff will provide equipment and supplies listed in Appendix I.

Official References	The references below are used in the development of the test questions and skill rating sheets:
	• Lawhead, James, and Baker. *Introduction to Veterinary Science*. Cengage Learning. Latest Edition.
	• American Red Cross Pet First Aid App
	• References for Companion Animal Breeds/Species Identification: (as posted as of Sept. 1, 2026)
	  • Dogs = American Kennel Club - www.akc.org
	  • Cats = The Cat Fanciers' Association - www.cfa.org
	The following additional resource is available at HOSA Webinars**:** AAVMC - Journey to Veterinary School and AAVMC Vet Pathways

ROUND ONE- Test

Test Instructions	All competitors will be given a test and answer sheet. The written test will consist of 50 multiple-choice items in a maximum of 60 minutes. See test instructions here.
Written Test Plan	Includes both Large and Small Animals The written test for Veterinary Science is: • Anatomy and Physiology - 24% • Basic Nutrients - 10% • Animal Behavior -6% • Diseases/Disease Prevention - 14% • Zoonoses - 6% • Clinical Practice - 10% • Emergency Care/First Aid - 12% • Principles of Surgery - 12% • Ethical, Legal, and Safety -6%

Sample Test Questions	1. How many days is the average length of pregnancy for a cat? (Lawhead pp 140)
	  A. 15 - 20
	  B. 30 - 35
	  C. **58 - 65**
	  D. 90 - 112
	2. A dog who is exhibiting bumps on their face and muzzle and licking their flank is most likely experiencing: (American Red Cross Pet First Aid App)
	  A. Bleeding.
	  B. **An allergic reaction.**

	C. A torsion. D. Frostbite. 3. What is the normal respiratory rate for a hamster? (Lawhead pp 84) A. 12 B. 26 C. **74** D. 90
Mystery Skill Video	This event has a mystery skill video that must be uploaded. The mystery skill will be released along with instructions to upload on January 18th. Videos must be uploaded by **February 12th** at midnight MST as the final deadline, and there will be **NO EXCEPTIONS.** We STRONGLY suggest not waiting until the last minute to upload online to avoid user challenges with the system. Videos must be uploaded to the hosa website for judges to access them. Detailed instructions for uploading materials can be found at https://hosa.org/competitive-event-digital-uploads/ For SLC, the digital materials uploaded by **February 12** will be PRE-SCREENED to qualify for Round 2. Competitors who do not upload materials are NOT eligible for the Round Two presentation portion of the competition and **will NOT be given a competition appointment time at SLC**.

ROUND TWO- Skills Assessment

1. The top competitors from Round One will advance to Round Two. The number of advancing competitors will be determined by the scores obtained in Round One, the mystery skill video upload, and the space and time available for Round Two. Competitors shall report to the event site 10 minutes before their appointment time.

2. Round Two is a selected skill(s) performance. The Round Two skills approved for this event are:

Skill I: Identify Instruments/Equipment (see list of equipment below)	**15 minutes**
Skill II: Identification of Companion Animal Breeds/Species (includes both cats and dogs- see list of breeds below)	**8 minutes**
Skill III: Preparation of the Operative Site	**7 minutes**
Skill IV: Simple Fecal Flotation	**5 minutes**
Skill V: Lifting and Restraining a Dog	**4 minutes**
Skill VI: Wrapping a Surgical Pack	**3 minutes**
Skill VII: Preparing a Feline to Obtain a Temperature	**6 minutes**

3. For all skills, body fluids will be simulated products.

4. Below is the list of equipment used for the **Skill I: Identify Instruments/Equipment.** Could be 15 numbered photos or instruments.

Ambu Bag	Endotracheal Tubes & Laryngoscope	Mouth Speculum	Sharps Container
Autoclave	Fecal Flotation Kits	Needle Holders	Splints
Bair Hugger Warming Unit	Hoof Testers	Patient Warming System	Surgical Pack
Balling Gun	Insulin Syringe	Penrose Drains	Tenotomy or Iris Scissors
Barnes Dehorner	Lavage System	Pulse Oximeter	Through the Needle Catheter
Binocular Microscope	Leukopet System	Radiograph Machine	Tissue Forceps
Butterfly Catheter	Mayo Scissors	Reagent Strip Test	Tooth Float
Cattle Prod	Mayo Stand	Scalpel Blades	Trocar
Colostrometer	Mobile Crash Cart	Semi-Automated External Defibrillator	Urinary Catheters
	Mobile X-Ray Unit	Senn Or Rake Retractor	Vacutainer

5. The following dogs will be included in the **Skill II: Identification of Companion Animal Breeds/Species.**

Sporting Group	**Working Group**	**Toy Group**	**Herding Group**
American Water Spaniel	Alaskan Malamute	Chihuahua	Australian Shepherd
Brittany	Boxer	Chinese Crested	Border Collie
Cocker Spaniel	Bullmastiff	Havanese	Cardigan Welsh Corgi
English Setter	Doberman Pinscher	Maltese	Collie
Golden Retriever	Great Dane	Pekingese	German Shepherd
Irish Setter	Great Pyrenees	Pomeranian	Old English Sheepdog
Labrador Retriever	Mastiff	Pug	
Weimaraner	Newfoundland	Shih Tzu	
	Rottweiler		
	Saint Bernard		
	Siberian Husky		
Hound Group	**Terrier Group**	**Non-Sporting Group**	
Basset Hound	Airedale Terrier	Boston Terrier	
Beagle	Miniature Schnauzer	Bulldog	
Bloodhound	Rat Terrier	Chow Chow	
Dachshund	Russell Terrier	Dalmatian	
Greyhound	Scottish Terrier	Lhasa Apso	
Whippet		Poodle Standard	

6 The following cats will be included in the **Skill II: Identification of Companion Animal Breeds/Species.**

Cat Breeds			
Abyssinian	American Bobtail	American Curl	American Shorthair
American Wirehair	Balinese	Bengal	Birman
Bombay	British Shorthair	Burmese	Burmilla
Chartreux	Colorpoint Shorthair	Cornish Rex	Devon Rex
Egyptian Mau	European Burmese	Exotic	Havana Brown
Japanese Bobtail	Khao Manee	Korat	LaPerm
Lykoi	Maine Coon Cat	Manx	Norwegian Forest Cat
Ocicat	Oriental	Persian	RagaMuffin
Ragdoll	Russian Blue	Scottish Fold	Selkirk Rex
Siamese	Siberian	Singapura	Somali
Sphynx	Tonkinese	Toybob	Turkish Angora
Turkish Van			

7.. The selected skill(s) will be presented to competitors as a written scenario at the beginning of the round. The scenario will be the same for each competitor. Some scenarios may involve the combination of multiple skills. In the event rating sheets are combined, it is not necessary to repeat a task a second time. An example would be that competitors would not need to identify the patient twice. A sample scenario is available here.

8. Timing will begin when the scenario is presented to the competitors and will be stopped at the end of the time allowed. The scenario is a secret topic. Competitors MAY NOT discuss or reveal the secret topic until after the event has concluded or will face penalties per the GRRs.

9. Competitors must complete all skill steps listed in the guidelines, even if the steps must be simulated/verbalized. (If the equipment is available, the competitors would complete all skill steps as the scenario warrants. The competitors will simulate/verbalize the steps if the equipment is unavailable.)
10. Judges will provide information to competitors as directed by the rating sheets. Competitors may ask questions of the judges while performing skills, if the questions relate to patient's condition and will be included in the scenario or judge script.
11. Competitors must use all equipment correctly and safely. Judges will stop a student and not award points for a step if they see a competitor is about to cause a risk of harm or about to damage equipment or other supplies.

Final Scoring

1. The competitor must earn a score of 70% or higher on the combined skill(s) in Round Two-Skill Assessment (excluding the test and ID equipment/animal breeds) in order to be recognized as an award winner at the ILC.
2. The final rank is determined by adding the round one test score plus the round two skill score. In the event of a tie, the highest test score will be used to determine the final placement.

Final Opportunities

The HOSA Scholarship program has funding available for HOSA members who have an interest in various health careers! The application process begins January 1, 2027, and can be found here: https://hosa.org/scholarships/.

Graduating from high school or completing your postsecondary/collegiate program does not mean your HOSA journey has to end. As a HOSA member, you are eligible to become a HOSA Lifetime Alumni Member- a free and valuable opportunity to remain connected, give back, and help to shape the future of the organization. Learn more and sign up at hosa.org/alumni.

Veterinary Science

Skill I: Identify Equipment and Instruments

Time: 15 minutes

Competitor #:_____ **Division:** ____SS_____PS/C **Judge's Signature:**_____

	Name of Instrument	Points (1 each for name & spelling)			Purpose of Use	One point for correct purpose/use	
1.		2	1	0		1	0
2.		2	1	0		1	0
3.		2	1	0		1	0
4.		2	1	0		1	0
5.		2	1	0		1	0
6.		2	1	0		1	0
7.		2	1	0		1	0
8.		2	1	0		1	0
9.		2	1	0		1	0
10.		2	1	0		1	0
11.		2	1	0		1	0
12.		2	1	0		1	0
13.		2	1	0		1	0
14.		2	1	0		1	0
15.		2	1	0		1	0

Total ID & Spelling (30 possible): _____ **Total Purpose (15 possible): _____**

Total Points (45 possible): _____

The expectation is that competitors read and are aware of all the content within these guidelines and associated links. Successful competitors will study all links for the detailed information.

Veterinary Science

Skill II: Identification of Companion Animal Breeds/Species

Time: 8 minutes

Competitor #:_____ **Division:** _____SS_____PS/Collegiate **Judge's Signature:**_____

	Companion Animal Breed/Species	**One point for correct identification**		**One point for correct spelling**	
1.		**1**	**0**	**1**	**0**
2.		**1**	**0**	**1**	**0**
3.		**1**	**0**	**1**	**0**
4.		**1**	**0**	**1**	**0**
5.		**1**	**0**	**1**	**0**
6.		**1**	**0**	**1**	**0**
7.		**1**	**0**	**1**	**0**
8.		**1**	**0**	**1**	**0**
9.		**1**	**0**	**1**	**0**
10.		**1**	**0**	**1**	**0**
11.		**1**	**0**	**1**	**0**
12.		**1**	**0**	**1**	**0**
13.		**1**	**0**	**1**	**0**
14.		**1**	**0**	**1**	**0**
15.		**1**	**0**	**1**	**0**
		Total ID (15 possible): _____		**Total Spell (15 possible):** _____	

Total Points (30 possible): _____

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Veterinary Science

Skill III: Preparation of the Operative Site

Time: 7 minutes

Competitor #:_____**Division:** _____SS_____PS/Collegiate **Judge's Signature:**_____

*Animals used at ILC will be stuffed animals. Live animals will not be used.
*If equipment is available, competitors should complete the steps while verbalizing.

	Skill III: Preparation of the Operative Site	**Possible**		**Awarded**	
1.	Washed hands or used alcohol based hand-rub for hand hygiene.	**2**	**0**		
2.	Verified the patient's identity.	**2**	**0**		
3.	Verified surgical skill being performed and surgical site.	**2**	**0**		
4.	Assured the animal was bathed and surgical site clipped, cleaned and urine was expressed from bladder.	**2**	**0**		
5.	Assembled materials for prep.	**1**	**0**		
6.	Positioned patient on back and secured legs with either ropes, sandbags, troughs or tape.	**1**	**0**		
7.	Opened sterile packages: bowl and gauze using aseptic technique.	**2**	**0**		
8.	Dropped four (4) gauze sponges into a sterile bowl and then poured germicide cover sponges, using aseptic technique.	**2**	**0**		
9.	Donned sterile gloves correctly.	**2**	**0**		
10.	Handled gauze sponges with sterile sponge forceps or the gloved hand using aseptic technique.	**2**	**0**		
11.	Began scrub at the intended incision site and continued out in concentric circles to an area of at least two inches larger than expected size of sterile field.	**2**	**0**		
12.	Sponge discarded after reaching the periphery.	**2**	**0**		
13.	Repeated steps 10, 11 & 12 two more times.	**12**	**0**		
14.	Blotted excess germicide solution with sterile gauze sponge(s).	**1**	**0**		
15.	Sprayed 10% Povidone Iodine solution on site.	**1**	**0**		
16.	Removed gloves and washed hands or used alcohol based hand-rub for hand hygiene.	**2**	**0**		
17.	Used appropriate verbal and nonverbal communication with patient and other personnel.	**2**	**0**		
	Total Points- Skill III: 70% Mastery for Skill III: 28	**40**			

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Veterinary Science

Skill IV: Simple Fecal Flotation

Time: 5 minutes

Competitor #:_____**Division:** _____SS_____PS/Collegiate **Judge's Signature:**_____

*Animals used at ILC will be stuffed animals. Live animals will not be used.

	Skill IV: Simple Fecal Flotation	**Possible**		**Awarded**	
1.	Washed hands or used alcohol based hand-rub for hand hygiene.	**2**	**0**		
2.	Applied non-latex exam gloves.	**2**	**0**		
3.	Assembled equipment and supplies.	**1**	**0**		
4.	Place approximately 2-5 g of feces in a paper cup.	**1**	**0**		
5.	Add 30 ml of flotation solution.	**1**	**0**		
6.	Using the tongue depressor, mix the feces to produce an evenly suspended emulsion.	**1**	**0**		
7.	Poured the suspension through a 10 cm (4"x4") gauze square into another cup.	**1**	**0**		
8.	Filled the shell vial (or 15 ml conical centrifuge tube) with the filtered solution to form a convex dome (meniscus) at the rim.	**1**	**0**		
9.	Placed a cover slip on top of the meniscus.	**1**	**0**		
10.	Verbalized leaving the cover slip in place for 10 – 20 minutes.	**1**	**0**		
11.	Picked the cover slip straight up and placed on a glass slide, fluid side down.	**1**	**0**		
12.	Removed non-latex gloves and washed hands or used alcohol based hand-rub for hand hygiene.	**2**	**0**		
	Total Points- Skill IV: 70% Mastery for Skill IV: 10.5	**15**			

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Veterinary Science

Skill V: Lifting and Restraining a Dog

Time: 4 minutes

Competitor #:_____**Division:** _____SS_____PS/Collegiate **Judge's Signature:**_____

**The competitor may be asked to perform lifts on the small, medium dogs, or verbally describe the lift for a large dog. Simulation of the cephalic venipuncture may be done on any sized dog. Animals will not be live animals; stuffed animals will be used.*

	Skill V: Lifting and Restraining a Dog	**Possible**		**Awarded**	
1.	Washed hands or used alcohol based hand-rub for hand hygiene.	**2**	**0**		
2.	Lifted the small dog onto the table, holding the dog draped over a forearm with the other hand holding on to the head just below the mandible.	**1**	**0**		
3.	Lifted the small dog off the table and back to the floor, using correct body mechanics and lifting technique.	**1**	**0**		
4.	Lifted the medium-sized dog onto the table, with one arm around the neck and the other arm around the rear end.	**1**	**0**		
5.	Held the medium-sized dog in a standing position by placing one arm around the dog's neck and the other around the abdomen, and hugging the dog close to the body.	**1**	**0**		
6.	Verbalized the proper technique for lifting a large dog.	**1**	**0**		
	**** Judge states, "Place the dog in a sitting position for a cephalic venipuncture."***				
7.	Placed patient on the table near one end, facing the edge, in the sitting position.	**2**	**0**		
8.	Restrained the patient's head by reaching under the neck, placing the hand behind the jaw and pressing the patient's head against the person's chest.	**2**	**0**		
9.	Used other arm to reach around rear of the dog and pull dog close to the body.	**2**	**0**		
10.	Moved arm that was holding the rear across the shoulders and grasped the leg opposite their body.	**2**	**0**		
11.	Held the leg by placing the elbow of the dog into the palm of that hand and pushing the leg forward.	**2**	**0**		
12.	Placed thumb on top of the leg, squeezing and rotating laterally, to occlude the vein.	**2**	**0**		
	**** Judge states, "Venipuncture is complete and blood is drawn."***				
13.	Released thumb after the blood was drawn.	**2**	**0**		
14.	Used appropriate verbal and nonverbal communication with patient and other personnel.	**2**	**0**		
15.	Washed hands or used alcohol based hand-rub for hand hygiene.	**2**	**0**		
	Total Points- Skill V: 70% Mastery for Skill V: 17.5	**25**			

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Veterinary Science

Skill VI: Wrapping a Surgical Pack

Time: 3 minutes

Competitor #:_____**Division:** _____SS_____PS/Collegiate **Judge's Signature:**_____

	Skill VI: Wrapping a Surgical Pack	**Possible**		**Awarded**	
1.	Assembled equipment and supplies.	**1**	**0**		
2.	Washed hands or used alcohol based hand-rub for hand hygiene.	**2**	**0**		
3.	Placed a large unfolded wrap diagonally in front of you.	**2**	**0**		
4.	Placed the instrument tray in the center of the wrap so that an imaginary line can be drawn from one corner of the wrap to the opposite corner and is perpendicular to the two sides of the instrument tray.	**2**	**0**		
5.	Folded the corner of the wrap that is closest over the instrument tray to its far side, tucked it underneath the tray with a tab out.	**2**	**0**		
6.	Folded the right corner over the pack two-thirds of the way to the opposite side.	**2**	**0**		
7.	Folded the left corner over the pack two-thirds of the way to the opposite side.	**2**	**0**		
8.	Folded the final corner. a. Folded the final corner down.	**2**	**0**		
	b. Tucked the fold under the previous two folds.	**2**	**0**		
	c. Folded the tip of the final fold so it is exposed for easy unwrapping.	**2**	**0**		
	d. Wrapped the pack in a second layer of cloth or paper, secured the final tab with autoclave or gas sterilization indicator tape for ease of grasping and opening.	**2**	**0**		
9.	Returned equipment and supplies.	**2**	**0**		
10.	Washed hands or used alcohol based hand-rub for hand hygiene.	**2**	**0**		
	Total Points- Skill VI: 70% Mastery for Skill VI: 17.5	**25**			

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Veterinary Science

Skill VII: Preparing a Feline to Obtain a Temperature

Time: 6 minutes

Competitor #:_____**Division:** _____SS_____PS/Collegiate **Judge's Signature:**_____

*Animals used at ILC will be stuffed animals. Live animals will not be used. *If equipment is available, competitors should complete the steps while verbalizing. ***The judge will verbalize the temperature. In standard practice, please note that all feline visits should be at least 15 minutes to follow the American Association of Feline Practitioners motto of "Go Slow to Go Fast." For HOSA purposes, this skill time has been reduced so that competitors can demonstrate sufficient knowledge of the appropriate steps on a stuffed animal.*

	Skill VII: Preparing a Feline to Obtain a Temperature	**Possible**		**Awarded**	
1.	Washed hands or used alcohol based hand-rub for hand hygiene.	**1**	**0**		
2.	Gathered and prepared equipment needed for skill.	**1**	**0**		
3.	Sprayed the area where cat will be seen with a synthetic FFP analog to promote calming and decrease anxiety.	**2**	**0**		
4.	Greeted cat & client by name with moderated body language & voice.	**2**	**0**		
5.	Placed the carrier on the exam table and opened the door to the carrier as soon as you enter the room.	**1**	**0**		
6.	Verbalize "the animal history of the cat has been obtained."	**1**	**0**		
	After obtaining the history, if the cat has left the carrier follow step #7 and skip #8 & #9. If the cat has not come out of the carrier skip step #7 and start again with step #8.				
7.	**If the cat has left the carrier:** Placed the carrier out of sight until the procedures are completed.	**1**	**0**		
8.	**If the cat will not come out of the carrier:** To decrease the cat's anxiety, placed a towel between the two halves of the carrier as you remove the top and front of the carrier.	**1**	**0**		
9.	Created a "tent" with the towel covering the cat. The cat remains accessible.	**1**	**0**		
10.	Used a towel to lightly swaddle cat and placed on exam area (OR if cat is still in carrier, allowed to remain in bottom of carrier for exam).	**1**	**0**		
11.	Placed hand on the top of the cat's head with the fingers pointed toward cat's nose using the first and fifth finger to hold each side of the head to prevent movement.	**2**	**0**		
12.	Attempted to massage or stroke the top of the head to relax the cat.	**2**	**0**		
13.	Observed for signs of increased anxiety in cat throughout procedure such as posture or facial changes. Reported observations to the judge.	**4**	**0**		
	Judge states, "Temperature has been taken and skill performed."				
14.	Released cat by unwrapping towel OR removing towel tented on top of carrier.	**1**	**0**		
15.	Verbalized "Owner will now comfort the cat and return the cat to the carrier."	**1**	**0**		
16.	Used a calm, positive demeanor and worked at a consistent pace throughout the skill.	**2**	**0**		
17.	Washed hands or used alcohol based hand-rub for hand hygiene.	**2**	**0**		

Total Points- Skill VII: Cat Left Carrier 70% Mastery for Skill IV: 16.8	**24**	
Total Points SKill VII:Cat did not Leave Carrier 70% Mastery for Skill VII 17.5	**25**	

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