

AEVNT ADVANCED SKILLS LIST

All qualified candidates will have demonstrated advanced equine veterinary nursing skills. In their performance of their duties and responsibilities as an equine veterinary nurse technician, all candidates shall demonstrate expertise in the majority of the following areas of advanced skills. Advanced skills may only be performed on an equine patient. Acceptable equine species are *Equus caballus* (horse), *Equus asinus* (donkey) and any hybrid thereof i.e. mule and hinny. All qualified candidates must show proficiency in Categories 1-4 and 12-13 as the mastery of the skills included in these categories are deemed essential for the equine veterinary nursing technician / VTS-EVN. Candidates must also be proficient in 75% of the remaining skills listed.

- *In the performance of their duties and responsibilities as an equine veterinary nurse, an AEVNT shall show competency in the following Advanced Skills:*

1. Horse Management

Skill	DVM or VTS-EVN Signature
<ul style="list-style-type: none"> • Demonstrate proper and safe restraint of equine patients including the use of physical restraint devices, including but not limited to, shanks and twitches 	
<ul style="list-style-type: none"> • Have a working knowledge of the set up and nursing care of a horse in a sling. 	
<ul style="list-style-type: none"> • Load injured, compromised or sick equine patient in a horse trailer using proper safety techniques 	
<ul style="list-style-type: none"> • Properly use hoof picks, hoof rasps, hoof nippers, and hoof knife 	
<ul style="list-style-type: none"> • Properly remove horseshoes 	

2. Equine Terminology

Skill	DVM or VTS-EVN Signature
<ul style="list-style-type: none"> • Demonstrate a working knowledge and understanding of equine terms and terminology through communication, application of skills and performance of duties 	

3. Equine Nutrition

Skill	DVM or VTS-EVN Signature
<ul style="list-style-type: none"> • Assist with client education in equine nutrition 	

<ul style="list-style-type: none"> • Demonstrate ability to identify an equine with nutrition concerns 	
<ul style="list-style-type: none"> • Demonstrate total (& partial) parenteral nutrition administration techniques 	

4. Anatomy and Physiology as related to equine species

Skill	DVM or VTS-EVN Signature
<ul style="list-style-type: none"> • Demonstrate a working knowledge and understanding of equine anatomy and physiology through communication, application of skills and performance of duties 	

5. Reproduction and Genetics

Skill	DVM or VTS-EVN Signature
<ul style="list-style-type: none"> • Prepare a mare for breeding exam (prep of the perineum...) 	
<ul style="list-style-type: none"> • Assist with artificial insemination 	
<ul style="list-style-type: none"> • Calibrate & operate computerized sperm motility analyzer 	
<ul style="list-style-type: none"> • Perform semen collection using mount mare & phantom mare 	
<ul style="list-style-type: none"> • Prepare endometrial & testicular biopsies (for histological sectioning & staining) 	
<ul style="list-style-type: none"> • Prepare semen extender for cool shipment 	
<ul style="list-style-type: none"> • Prepare semen extender for freezing stallion semen 	
<ul style="list-style-type: none"> • Prepare solutions and transport media for flushing embryos 	
<ul style="list-style-type: none"> • Safely handle breeding stallions for natural cover, semen collection, etc. 	
<ul style="list-style-type: none"> • Safely handle mares (including ovariectomized mares) during semen collection 	
<ul style="list-style-type: none"> • Set up and assist with standing flank oocyte aspirations and transfer 	
<ul style="list-style-type: none"> • Set up and assist with uterine infusion & lavage 	
<ul style="list-style-type: none"> • Standardize & use pH meter 	
<ul style="list-style-type: none"> • Standardize & operate osmometers 	

<ul style="list-style-type: none"> • Assist & prep for normal foaling delivery, dystocia, or C-section delivery 	
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6. Wellness Care

Skill	DVM or VTS-EVN Signature
<ul style="list-style-type: none"> • Apply & use mouth speculums 	
<ul style="list-style-type: none"> • Be knowledgeable in the performance of a thorough dental examination, including aging of the horse 	
<ul style="list-style-type: none"> • Perform sheath cleaning on both stallions and geldings 	
<ul style="list-style-type: none"> • Demonstrate working knowledge of recommended vaccination & deworming schedules (as recommended by the AAEP) 	

7. Foal Care

Skill	DVM or VTS-EVN Signature
<ul style="list-style-type: none"> • Perform foal emergency set – up & receiving 	
<ul style="list-style-type: none"> • Perform foal feeding via nasogastric tube 	
<ul style="list-style-type: none"> • Demonstrate foal folding 	
<ul style="list-style-type: none"> • Demonstrate foal naval umbilicus care techniques 	
<ul style="list-style-type: none"> • Perform milk collection on mares 	
<ul style="list-style-type: none"> • Perform nasogastric intubation 	
<ul style="list-style-type: none"> • Place and maintain indwelling feeding tubes 	
<ul style="list-style-type: none"> • Reposition recumbent foal 	
<ul style="list-style-type: none"> • Perform proper foal restraint techniques 	
<ul style="list-style-type: none"> • Demonstrate knowledge & set up for ICU foal care 	
<ul style="list-style-type: none"> • Demonstrate knowledge of and recognition of signs of imminent foaling by mare 	
<ul style="list-style-type: none"> • Assist with foaling, both routine and dystocia 	

8. Pharmacology

Skill	DVM or VTS-EVN Signature
<ul style="list-style-type: none"> • Demonstrate working knowledge of equine pharmacology 	
<ul style="list-style-type: none"> • Identify and maintain list and proper inventory control of all drugs, supplies, equipment needed for an equine practice (fixed as well as ambulatory) 	
<ul style="list-style-type: none"> • Demonstrate a working knowledge of race track and performance / sport horse drugs and supplies, including withdrawal times, rules regulations & resources 	
<ul style="list-style-type: none"> • Demonstrate knowledge of controlled substances, keeping a log and the rating system (Class I – V) 	

9. Laboratory Diagnosis

Skill	DVM or VTS-EVN Signature
<ul style="list-style-type: none"> • Properly collect diagnostic specimens for analysis (i.e. urine, blood, feces, cells, tissue, specimens for cytology) 	
<ul style="list-style-type: none"> • Perform an IgG assessment 	
<ul style="list-style-type: none"> • Perform a blood gas analyzer quality control 	
<ul style="list-style-type: none"> • Demonstrate adequate blood gas analyzer usage – obtain, measure & interpret (normal vs. abnormal) 	
<ul style="list-style-type: none"> • Perform arterial blood sample collection techniques 	
<ul style="list-style-type: none"> • Perform blood culture techniques 	
<ul style="list-style-type: none"> • Perform milk sampling techniques 	
<ul style="list-style-type: none"> • Be knowledgeable regarding the legal and proper workup for a coggins (EIA) test & health certificate (proper collection & paperwork) 	
<ul style="list-style-type: none"> • Perform a manual CBC 	
<ul style="list-style-type: none"> • Demonstrate knowledge in the evaluation of blood donor cross – match results & determination of the best donor 	
<ul style="list-style-type: none"> • Perform microbiology tests to include cultures & sensitivities 	

<ul style="list-style-type: none"> • Perform fecal examination using multiple methods 	
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10. Anesthesia

Skill	DVM or VTS-EVN Signature
<ul style="list-style-type: none"> • Perform endotracheal tube placement & management 	
<ul style="list-style-type: none"> • Perform ventilator set – up & administration of anesthetic gases. 	
<ul style="list-style-type: none"> • Maintain & use equine specific diagnostic monitoring equipment 	
<ul style="list-style-type: none"> • Perform set – up & interpretation (normal vs. abnormal) of capnography 	
<ul style="list-style-type: none"> • Direct arterial blood pressure equipment set – up & blood gas interpretation (normal vs. abnormal) 	
<ul style="list-style-type: none"> • Perform an electrocardiogram – attach leads correctly, understand basic interpretation & advanced interpretation (normal vs. abnormal) 	
<ul style="list-style-type: none"> • Demonstrate re- breathing bag usage 	
<ul style="list-style-type: none"> • Demonstrate nursing anesthesia skills specific to equine including the following: 	
<ul style="list-style-type: none"> ○ Demonstrate knowledge of analgesic drugs – dosages & usages 	
<ul style="list-style-type: none"> ○ Demonstrate knowledge of anesthetic agents and induction drugs 	
<ul style="list-style-type: none"> ○ Demonstrate knowledge of CRI calculations & administration 	
<ul style="list-style-type: none"> ○ Demonstrate knowledge of drugs for cardiac arrest 	
<ul style="list-style-type: none"> ○ Demonstrate knowledge of paralytic agents 	
<ul style="list-style-type: none"> ○ Demonstrate knowledge of reversal agents 	
<ul style="list-style-type: none"> ○ Demonstrate knowledge of synthetic colloids, hypertonic saline, blood, & their indications in the equine 	
<ul style="list-style-type: none"> ○ Demonstrate knowledge of the use of sodium bicarbonate 	
<ul style="list-style-type: none"> ○ Demonstrate knowledge of the use of calcium 	
<ul style="list-style-type: none"> ○ Demonstrate knowledge of the use of anticholinergics 	
<ul style="list-style-type: none"> ○ Demonstrate knowledge of the use of Inotropes 	

○ Demonstrate knowledge of the use of Guaifenesin (GG)	
○ Assist with an intercostal block	
○ Assist with local and regional anesthesia	
○ Perform a mask induction of a foal	
○ Perform nasotracheal intubation	

11. Surgical Assistance

Skill	DVM or VTS-EVN Signature
• Perform suction set – up & use	
• Properly apply head & tail ropes for recoveries	
• Properly place recovery hood	
• Perform re –intubation (guide tube)	
• Demonstrate proper handling of the equine patient being induced / recovered	
• Perform post operative patient recovery	
• Perform pre – operative patient preparation	
• Be knowledgeable on sterile fields and how to assist in a sterile environment	
• Be knowledgeable on precautions to take with a contaminated surgery	
• Set up, operate, clean & troubleshoot arthroscopy equipment	
• Demonstrate set up & use of electrocautery unit	
• Demonstrate surgical laser set up & usage	
• Operate hoist using safety techniques for both personnel & patient	
• Demonstrate a knowledge of proper positioning & padding for procedures	
• Operate laparoscopic equipment	
• Operate videoendoscopic unit	
• Properly package instruments for cold, gas , & steam sterilization as well as troubleshoot sterilization units & be aware of shelf life of all methods of sterilization	

12. Nursing Care / Fluid Therapy

Skill	DVM or VTS-EVN Signature
<ul style="list-style-type: none"> Place a sterile urinary catheter 	
<ul style="list-style-type: none"> Administer parenteral medications intramuscularly, intravenously, & subcutaneously 	
<ul style="list-style-type: none"> Perform blood collection for transfusions 	
<ul style="list-style-type: none"> Administer blood to an equine patient 	
<ul style="list-style-type: none"> Demonstrate adequate knowledge of cardio pulmonary resuscitation (CPR) techniques 	
<ul style="list-style-type: none"> Perform administration of oral medications & understand the pharmacokinetics of such 	
<ul style="list-style-type: none"> Perform lateral thoracic vein catheterization 	
<ul style="list-style-type: none"> Perform IV fluid administration on both gravity dial system & pump 	
<ul style="list-style-type: none"> Demonstrate working knowledge of fluid doses & ability to calculate appropriate volumes of additives, fluid doses & drip rates 	
<ul style="list-style-type: none"> Perform oxygen catheter placement 	
<ul style="list-style-type: none"> Perform oxygen set up & therapy as directed 	
<ul style="list-style-type: none"> Perform “Piggy back” fluids administration & demonstrate knowledge regarding interactions 	
<ul style="list-style-type: none"> Demonstrate padding & positioning the recumbent horse 	
<ul style="list-style-type: none"> Reposition recumbent equine adult 	
<ul style="list-style-type: none"> Place nasogastric tube for the purpose of stomach lavage & refluxing of patient & perform reflux procedure / administration of medications or liquids 	
<ul style="list-style-type: none"> Obtain venous blood – cephalic vein 	
<ul style="list-style-type: none"> Obtain venous blood – facial vein (equine) 	
<ul style="list-style-type: none"> Demonstrate plasma selection & administration – set up, materials, monitoring (J_5 for endotoxemia, Hi-gamma IgG for FPT, botulism antitoxin, WNV...) 	
<ul style="list-style-type: none"> Administer eye medication through sub-palpebral lavage system 	
<ul style="list-style-type: none"> Apply fluorescein dye to eye for examination per DVM orders 	
<ul style="list-style-type: none"> Assist with an auriculopalpebral block 	

<ul style="list-style-type: none"> • Perform proper eye examination using gross observation as well as ophthalmoscope examination for the purpose of data collection, not to diagnose 	
<ul style="list-style-type: none"> • Demonstrate nebulizer (i.e. Aero Mask) set up & usage 	
<ul style="list-style-type: none"> • Demonstrate equine patient euthanasia techniques 	
<ul style="list-style-type: none"> • Demonstrate a working knowledge of advanced bandaging & wound management techniques including splints, casts, wound preps, & aseptic techniques 	
<ul style="list-style-type: none"> • Perform central venous guide wire catheterization to include over the wire catheters being placed in the jugular, lateral thoracic or cephalic veins 	
<ul style="list-style-type: none"> • Recognize signs of sepsis & demonstrate knowledge of management 	
<ul style="list-style-type: none"> • Demonstrate a working knowledge of outpatient nursing, including client communications and status of patient. (medical facility & ambulatory) 	

13. Diagnostics / Treatment Procedures

Skill	DVM or VTS-EVN Signature
<ul style="list-style-type: none"> • Set up, operate & clean endoscopic equipment 	
<ul style="list-style-type: none"> • Assist with performing an endoscopic examination 	
<ul style="list-style-type: none"> • Place a nasogastric tube (adult horse) 	
<ul style="list-style-type: none"> • Set up & assist with a cerebral spinal tap 	
<ul style="list-style-type: none"> • Prepare & assist with an abdominocentesis, arthrocentesis, thoracocentesis, or pericardiocentesis 	
<ul style="list-style-type: none"> • Set up, operate, position & mark correctly for digital radiography & CR 	
<ul style="list-style-type: none"> • Perform proper positioning & exposure of equine radiographs with a focus on those views normally taken for repository films or an extensive pre – purchase exam (multiple anatomical areas / multiple views) 	

<ul style="list-style-type: none"> • Demonstrate Doppler ultrasound set up & usage 	
<ul style="list-style-type: none"> • Perform / assist with ultrasound exam of equine abdomen (under DVM supervision) 	
<ul style="list-style-type: none"> • Perform / assist with ultrasound examination of equine limbs (under DVM supervision) 	
<ul style="list-style-type: none"> • Prepare patient for ultrasound examination 	
<ul style="list-style-type: none"> • Set up, operate & maintain ultrasound equipment 	
<ul style="list-style-type: none"> • Set up & operate transrectal ultrasound equipment 	
<ul style="list-style-type: none"> • Set up, operate & perform Shockwave therapy per DVM orders (under DVM supervision) 	
<ul style="list-style-type: none"> • Perform Thermography camera operation 	
<ul style="list-style-type: none"> • Participate in neurological exam & provide assistance 	
<ul style="list-style-type: none"> • Assist with lameness examinations on a variety of cases 	
<ul style="list-style-type: none"> • Lunge horses using proper technique & safety measures 	
<ul style="list-style-type: none"> • Demonstrate proper use of hoof testers 	
<ul style="list-style-type: none"> • Perform musculoskeletal exam for the purposes of data collection (under DVM supervision) 	
<ul style="list-style-type: none"> • Assist with round pen lameness examination 	
<ul style="list-style-type: none"> • Prepare for / assist with joint and nerve blocks & regional limb perfusions / blocks / injections (including ultrasound assisted injections) 	
<ul style="list-style-type: none"> • Perform site prep for nerve block & sterile site prep for joint injection 	
<ul style="list-style-type: none"> • Trot horse for lameness exam 	
<ul style="list-style-type: none"> • Perform flexion tests 	
<ul style="list-style-type: none"> • Safely handle & assist with nuclear medicine (i.e. Iridium implants) 	
<ul style="list-style-type: none"> • Assist with IRAP procedures 	
<ul style="list-style-type: none"> • Assist with Stem Cell procedures, collection, shipping & injections 	
<ul style="list-style-type: none"> • Perform proper CO2 handling & usage techniques 	

<ul style="list-style-type: none"> • Demonstrate proper liquid nitrogen handling techniques 	
<ul style="list-style-type: none"> • Have knowledge of nuclear scintigraphy & be able to assist in procedures 	
<ul style="list-style-type: none"> • Set up & assist with an emergency tracheostomy 	
<ul style="list-style-type: none"> • Prepare & assist with venogram / myelogram studies 	
<ul style="list-style-type: none"> • Be familiar with the recommendations for the use of & patient preparation for a hyperbaric O2 chamber 	

14. Equine Medical Emergencies

Skill	DVM or VTS-EVN Signature
<ul style="list-style-type: none"> • Recognize & respond to equine specific veterinary medical emergencies 	
<ul style="list-style-type: none"> • Perform emergency colic set up & receiving 	
<ul style="list-style-type: none"> • Perform emergency dystocia set up & receiving 	
<ul style="list-style-type: none"> • Perform receiving & set up for uterine prolapse 	
<ul style="list-style-type: none"> • Perform receiving & set up for a dummy / red bag foal 	
<ul style="list-style-type: none"> • Assist with & prepare for management of fracture patients 	
<ul style="list-style-type: none"> • Assist with & prepare for management of lacerations / traumas 	
<ul style="list-style-type: none"> • Assist with & prepare for neurologic emergencies (i.e. WNV, Rabies, EPM) 	
<ul style="list-style-type: none"> • Assist with pneumothorax & hemothorax chest tube placement 	
<ul style="list-style-type: none"> • Perform proper catheter placement in an emergency situation 	
<ul style="list-style-type: none"> • Perform catheter placement for acute blood loss 	
<ul style="list-style-type: none"> • Set up & perform blood transfusion 	
<ul style="list-style-type: none"> • Demonstrate a knowledge of any forms required & client communication in an emergency situation (i.e. euthanasia /surgery) 	
<ul style="list-style-type: none"> • Demonstrates knowledge regarding the process involved in collection of organ harvest (i.e. corneal, testicular or ovarian) 	

<ul style="list-style-type: none"> • Demonstrate a knowledge of receiving & set up for eye emergencies 	
<ul style="list-style-type: none"> • Demonstrate a knowledge of upper airway obstruction & be able to assist with tracheotomy placement 	
<ul style="list-style-type: none"> • Demonstrate how to provide proper triage over the phone... recognizing an emergency from a regular visit 	

15. Office Procedures / Basic Hospital Practice

Skill	DVM or VTS-EVN Signature
<ul style="list-style-type: none"> • Demonstrate a thorough knowledge of the complexities & differences involved in the management of an equine office, such as communication, ownership, scheduling, reports, ambulatory services, facilities and basic financial information such as budgets 	
<ul style="list-style-type: none"> • Demonstrate a working knowledge of race track and performance / sport horse regulations 	
<ul style="list-style-type: none"> • Demonstrate knowledge of pre purchase examinations : what is entailed, what to look for , paperwork, procedures, communication, legal requirements 	
<ul style="list-style-type: none"> • Perform medical records management 	
<ul style="list-style-type: none"> • Record dictation of ultrasound, surgical and pre purchase examination notes into medical records 	
<ul style="list-style-type: none"> • Properly record patient notes in SOAP format 	
<ul style="list-style-type: none"> • Demonstrate a working knowledge of export and import regulations for equines 	
<ul style="list-style-type: none"> • Demonstrate a working knowledge of equine passport requirements and paperwork completion 	
<ul style="list-style-type: none"> • Demonstrate a working knowledge of all required forms for insurance, PPE, surgery, euthanasia, to including all legalities 	
<ul style="list-style-type: none"> • Demonstrate a working knowledge of all regulatory bodies (USDA, FEI, AVMA, PLIT, USEF, State Racing boards) as related to equines 	
<ul style="list-style-type: none"> • Demonstrate a working knowledge & adherence to DEA & controlled substance handling, storage, and recording 	
<ul style="list-style-type: none"> • Effectively communicate veterinarian's concerns to the client & demonstrate competency in explaining pertinent information with the client 	

16. Safety Management and Bio – Security as it relates to the horse

Skill	DVM or VTS-EVN Signature
• Demonstrate isolation stall set up	
• Demonstrate isolation stall cleaning	
• Demonstrate Bio – Security protocol set up	
• Demonstrate knowledge regarding USDA transport requirements	
• Demonstrate knowledge regarding quarantine requirements & procedures	
• Demonstrate knowledge in the transmission of diseases & pathogens	
• Demonstrate knowledge in zoonosis as applied to equine species	
• Demonstrate knowledge of management of rabies specimens	

Please note skills sheets must be signed by a Veterinarian who is a member of AAEP, a Veterinary diplomat employed in an equine practice, or a VTS – EVN.

Applicant Information

Applicant Name (Print) _____

Date _____

Applicant Signature _____

Signature Listing

Signature _____

Name (print) _____

Credentials _____ Date _____

Phone Number _____ Email _____

Signature _____

Name (print) _____

Credentials _____ Date _____

Phone Number _____ Email _____

Signature _____

Name (print) _____

Credentials _____ Date _____

Phone Number _____ Email _____

Signature _____

Name (print) _____

Credentials _____ Date _____

Phone Number _____ Email _____

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