### **Instructional Framework**

## ARIZONA CTE

#### **Veterinary Assisting**

01.8301.00

This Instructional Framework identifies, explains, and expands the content of the standards/measurement criteria, and, as well, guides the development of multiple-choice items for the Technical Skills Assessment. This document corresponds with the Technical Standards endorsed on January 22, 2020.

Domain 1: Communication, Client Relations, and Recordkeeping Instructional Time: 25-35%	
STANDARD 1.0 PERFORM OFFICE FUNCTIONS	
1.1 Demonstrate appointment scheduling using paper and electronic methods (i.e., triage, type of appointment, office, doctor, and hospital schedules, etc.)	<ul> <li>Appointment type</li> <li>Walk-ins</li> <li>Emergencies</li> <li>Technician vs. doctor</li> <li>Drop-off/Direct admit</li> <li>Appointment time needed</li> <li>Multiple doctors</li> <li>Phone triage</li> <li>Reminder calls</li> <li>Special instructions</li> </ul>
1.2 Prepare appropriate forms and certificates for signature (e.g., rabies, sterilization, and health)	<ul> <li>Sterilization certificate</li> <li>Rabies certificate</li> <li>Health certificates (international and domestic)</li> <li>Medical record release</li> <li>Vaccine history</li> <li>Against medical advice</li> <li>Estimates/Treatment plans</li> <li>Anesthesia consent</li> <li>Euthanasia/Care of body</li> <li>CPR/DNR</li> <li>Patient/Client information</li> <li>Prescription refill requests</li> <li>Specialty paperwork</li> </ul>

1.3 Admit a patient (i.e., greet client, determine procedure, provide cost or estimate, use laymen or medical terminology as appropriate, etc.)	<ul> <li>Proper forms</li> <li>Estimates/Treatment plan</li> <li>Patient identification (collars/cage cards)</li> <li>Patient placement</li> <li>Weight</li> </ul>
1.4 Discharge a patient (i.e., include services performed, diagnosis, follow up of doctor's orders, and future appointments; explain medications, clarify questions; assist to vehicle if necessary, etc.)	<ul> <li>Proper forms</li> <li>Client education/Discharge instructions</li> <li>Review medications</li> <li>Scheduling</li> </ul>
1.5 File, retrieve, and maintain medical records in accordance with AZ Veterinary Medical Examining Board, Administrative Rules Article 5. Standards of Practice R3-11-502 Standards of Practice L	<ul> <li>Chart creation/Yearly update</li> <li>Patient/client verification</li> <li>Proper filing method (alphabetical/client ID)</li> <li>Electronic patient records</li> <li>Record purging/Legal requirements</li> <li>Chart review prior to re-filing/saving</li> <li>Record ownership</li> <li>Initialing, dating, and correcting</li> </ul>
1.6 Use practice management software to maintain electronic health records for accuracy and security	<ul> <li>Input patient information</li> <li>Medical record charting</li> <li>Electronic vs. handwritten forms</li> <li>Electronic Medical Record (EMR) Software (Cornerstone, AVImark, ImproMed etc.)</li> </ul>
1.7 Follow office procedures for invoicing, billing, payment on account, and processing travel sheets	<ul> <li>Invoice (circle sheets)</li> <li>Billing</li> <li>Payments (types and split payments)</li> <li>Deposits prior to treatment</li> <li>Cash out/Make change procedures</li> </ul>
1.8 Answer, prioritize, and accurately document phone calls	<ul> <li>Phone skills</li> <li>Answering script</li> <li>Hold policy</li> <li>Recognizing emergency situations</li> <li>Delegating call to an appropriate staff member</li> </ul>

1.9 Request records and information from other veterinary facilities	<ul> <li>Recognize hospital procedures</li> <li>Confidentiality</li> <li>Legal policies</li> <li>Timeline</li> <li>Professional courtesy</li> <li>Emergency clinic forms</li> </ul>
1.10 Identify and describe the function of office equipment (i.e., fax, copier, scanner, and credit card machine, etc.)	<ul> <li>Fax</li> <li>Copier</li> <li>Scanner</li> <li>Credit card machine</li> <li>Mailing documents</li> <li>Computer</li> </ul>
STANDARD 2.0 APPLY RECORDKEEPING SKILLS	
2.1 Identify commonly used root words, prefixes, and suffixes for charting purposes	<ul> <li>Define parts</li> <li>Anatomical relation</li> <li>Procedural relation</li> </ul>
2.2 Define medical terms based on their prefixes, roots, and/or suffixes (i.e., ovariohysterectomy: ovario-, -hyster-, - ectomy, etc.)	<ul> <li>Recognize</li> <li>Define</li> <li>Breakdown</li> <li>Combine words</li> </ul>
2.3 Use common medical terminology and abbreviations	Written     Verbal
2.4 Identify components of the medical record (i.e., demographic information, lab and image results, history, progress notes, etc.)	<ul> <li>Entering complaint</li> <li>Signalment</li> <li>Subjective</li> <li>Objective</li> <li>Assessment</li> <li>Plan</li> <li>Various reports (Lab, Radiology, RX)</li> <li>Medical documents (Tx sheet, Sx record, master problem list)</li> </ul>

2.5 Record an accurate history of the patient, and report chief complaints	<ul> <li>Entering complaint</li> <li>Signalment</li> <li>Subjective</li> <li>Spell check</li> </ul>
2.6 Demonstrate a progress note using the format of SOAP (subjective, objective, assessment, and plan)	<ul> <li>Entering complaint</li> <li>Signalment</li> <li>Subjective</li> <li>Objective</li> <li>Assessment</li> <li>Plan</li> <li>Various reports (Lab, Radiology, RX)</li> <li>Medical documents (Tx sheet, Sx record, master problem list)</li> </ul>
2.7 Ensure completeness of the medical record	<ul> <li>Entering complaint</li> <li>SOAP</li> <li>Discharges</li> <li>Additional appointments</li> <li>Client communications</li> <li>Record organization</li> </ul>
2.8 Maintain integrity and security of the medical record	<ul><li>Confidentiality</li><li>VCPR</li><li>Legal ownership</li></ul>
2.9 Retrieve and interpret medical records	<ul> <li>Recognize hospital procedures</li> <li>Confidentiality</li> <li>Legal policies</li> <li>Timeline (securing and sending records within a reasonable time)</li> </ul>
STANDARD 3.0 DEMONSTRATE EFFECTIVE COMMUNICATION AND CLIENT RELATIONS	
3.1 Demonstrate appropriate verbal and nonverbal communication skills matching the tone of the room/situation	<ul> <li>Listening skills</li> <li>Eye contact</li> <li>Professional response</li> <li>Body language/Facial expressions</li> <li>Tone of voice</li> </ul>

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3.2 Demonstrate appropriate written and electronic communication matching technology to content	<ul> <li>Email etiquette</li> <li>Proper grammar/Spelling</li> <li>Texting</li> <li>Social media</li> </ul>
3.3 Identify and show respect for cultural differences (i.e., religion, euthanasia practices, end-of-life procedures, etc.)	<ul> <li>Cultural beliefs (compassion)</li> <li>Generational differences</li> <li>Courtesy</li> <li>Tact</li> <li>Separating morals vs. ethics</li> </ul>
3.4 Describe the steps and stages of the grief process	<ul> <li>Empathy</li> <li>Sympathy</li> <li>Client comforts</li> <li>Five Stages of Grief</li> <li>Compassion fatigue vs. burnout</li> </ul>
3.5 Translate medical terminology into client-friendly language	<ul><li>Recognize</li><li>Define</li></ul>
3.6 Explain the value of recommended procedures	<ul> <li>Client education</li> <li>Business costs</li> <li>Client financial burden</li> <li>Preventative vs. general health vs. emergency</li> </ul>
3.7 Explain release of medical record requirements in accordance with AZ Veterinary Medical Examining Board, Administrative Rules. Article 5 Standards of Practice R3-11-501. Ethical Standards 8.	<ul> <li>Forms</li> <li>Legal</li> <li>Policies</li> <li>Timeframe</li> <li>VCPR</li> </ul>
STANDARD 4.0 APPLY LEGAL, ETHICAL, AND PROFESSIONAL PRACTIC	ES
4.1 Describe the roles and responsibilities of each member of the veterinary health team in the delivery of excellent care	<ul> <li>Job duties</li> <li>DVM</li> <li>CVT/LVT/RVT</li> <li>Veterinary Assistant</li> <li>Kennel Assistant</li> <li>Practice Manager/Hospital Administrator</li> </ul>

	<ul> <li>Non-traditional pathways</li> <li>Legally prohibited skills for anyone other than a DVM (Diagnosis, Surgery, Prescribing)</li> <li>State to state differences between CVT and Assistant (credentialed vs. non-credentialed)</li> </ul>
4.2 Distinguish between ethical and unethical conduct in a veterinary practice in accordance with R3-11-501. 1-5, and 9.; ARS 32-2232	<ul> <li>Morals</li> <li>Ethics</li> <li>Malpractice</li> <li>Professional negligence</li> <li>Gross incompetence</li> <li>Neglect</li> <li>Slander</li> <li>Animal abuse (including mandatory reporting)</li> <li>Animal advocates</li> <li>Misrepresentation</li> </ul>
4.3 Explain the human-animal bond and its implications for veterinary practice	<ul> <li>Define human-animal bond</li> <li>Recognize the importance and role of human-animal bond</li> <li>Animal behavior</li> </ul>
4.4 Demonstrate professionalism with respect to client decisions	<ul> <li>Cultural beliefs (compassion)</li> <li>Generational differences</li> <li>Courtesy</li> <li>Tact</li> <li>Separating morals vs. ethics</li> <li>Empathy</li> </ul>
4.5 Demonstrate professional appearance and language in the workplace	<ul> <li>Clean uniforms</li> <li>Proper shoes</li> <li>Personal hygiene</li> <li>Proper language</li> <li>Jewelry (facial), tattoos, hair color</li> <li>Nails (length and shape)</li> </ul>
4.6 Demonstrate use of electronic communication in the workplace (e.g., cell phone, text messaging, social networking, and digital photography)	<ul><li>Email etiquette</li><li>Proper grammar/spelling</li><li>Cell phone</li></ul>

	<ul> <li>Texting</li> <li>Social media</li> <li>Digital photography</li> <li>Individual hospital policy</li> <li>Confidentiality</li> </ul>
4.7 Explain confidentiality issues, regulations, and requirements related to veterinary medicine	<ul> <li>Client information</li> <li>Hospital policies</li> <li>State laws</li> <li>Verbal vs. electronic</li> <li>Conflict of interest/Personal relationships</li> </ul>
4.8 Follow local, state, and federal laws and regulations as they apply to veterinary assistants	<ul> <li>Federal laws</li> <li>State laws</li> <li>Hospital policies</li> <li>Arizona Veterinary Medical Examining Board</li> <li>Specialty agencies</li> </ul>
4.9 Defend the importance of and explain legal implications of the veterinary-client-patient relationship in accordance with AZ Veterinary Medical Examining Board definition of VCPR. ARS 32-2201. 25. a-c	• VCPR

Domain 2: Patient and Staff Safety Instructional Time: 25-35%	
STANDARD 5.0 APPLY SANITATION AND SAFETY MEASURES	
5.1 Explain basic sanitation and disinfection techniques in accordance with AZ Veterinary Medical Examining Board, Administrative Rules R3-11-101. 26.	<ul> <li>OSHA</li> <li>Infection control</li> <li>Disinfection vs. sterilization vs. sanitation</li> <li>Clinic policy</li> <li>Hand hygiene</li> <li>Contact time/Spectrum of activity</li> <li>PPE protocols (Application and removal of PPE's)</li> <li>Isolation vs. general protocols</li> <li>SDS</li> </ul>

5.2 Inventory commonly used products and supplies for expiration dates, quantity, and availability	<ul> <li>Serial numbers</li> <li>Expiration dates</li> <li>Storage</li> <li>Proper disposal (controlled vs. non-controlled)</li> <li>Controlled substances log</li> <li>Controlled substance forms</li> <li>OTC</li> <li>Supply costs - Supply/Demand</li> </ul>
5.3 Restock supplies (i.e., accepting supplies, shelving supplies, rotating stock, want/need list, etc.)	<ul> <li>Receiving deliveries, packing slips</li> <li>Rotating stock</li> <li>Want/Wish list</li> <li>Clinic policy</li> </ul>
5.4 Identify communicable and zoonotic diseases (e.g., germs from direct or indirect contact with animals, and vector borne or foodborne transmission)	<ul> <li>Zoonoses</li> <li>Common canine/Feline contagious diseases         <ul> <li>Germs</li> <li>Direct/Indirect</li> <li>Vector borne</li> <li>Foodborne transmission</li> </ul> </li> <li>Infection control procedures</li> <li>Cleaning/Disinfecting</li> <li>PPE/Personal hygiene</li> </ul>
5.5 Comply with hazardous labeling requirements according to OSHA	<ul> <li>OSHA requirements</li> <li>Hazardous labeling pictograms</li> <li>Secondary label requirements</li> <li>SDS</li> </ul>
5.6 Demonstrate proper hand hygiene according to the CDC (Center for Disease Control)	<ul><li>Hand hygiene</li><li>PPEs</li></ul>
5.7 Demonstrate proper donning, removal, and discarding of personal protective equipment (PPE) according to standard procedure (e.g., gloves, gowns, masks, goggles, shoe covers, bonnets, and face shields)	<ul> <li>Gloves sterile vs. exam/nonsterile</li> <li>Isolation, surgery, dental, x-ray, biohazard PPEs</li> <li>Application and removal of PPE to prevent contamination</li> <li>Disposal of PPE</li> </ul>

5.8 Explain isolation protocols and procedures (i.e., exam room, treatment area, diagnostic testing, etc.)	<ul> <li>Common small animal diseases requiring patient isolation</li> <li>Isolation room requirements</li> <li>PPEs</li> <li>Facility policy</li> </ul>
5.9 Explain procedures for cleaning chemical and biological spills	<ul> <li>OSHA requirements</li> <li>SDSs and location of SDS book, reading, interpreting</li> <li>Common chemicals used/seen in most veterinary hospitals</li> <li>Dangers of frequently used chemicals/drugs/agents</li> <li>Spill kit location and components</li> </ul>
5.10 Explain the content, purpose, and location of Safety Data Sheets (SDSs)	SDS interpretation, access, maintenance
5.11 Use fire and chemical safety protocols (e.g., SDS, and the use of fire extinguishers)	<ul> <li>Legal requirements</li> <li>Fire extinguisher location/use/maintenance</li> <li>Emergency shower and eyewash locations</li> <li>SDS book and location</li> </ul>
5.12 Describe evacuation plans used by various facilities	<ul> <li>Posted evacuation plans</li> <li>Facility policy</li> <li>Ensure human safety FIRST</li> <li>Animal evacuation</li> </ul>
5.13 Follow the procedure for reporting unsafe conditions for self and others (e.g., electrical hazards, spillages, puddles on floor, and fractious patients)	<ul> <li>Recognizing unsafe conditions</li> <li>Electrical hazard</li> <li>Spillages</li> <li>Puddles on floor</li> <li>Fractious patients</li> <li>Facility policy for reporting</li> <li>Reporting to OSHA</li> </ul>
5.14 Demonstrate proper body mechanics and lifting techniques	<ul><li>40 lb. rule, get help</li><li>Lifting with legs, not back</li></ul>
5.15 Recognize radiation signage	Legal requirements

5.16 Store, safely handle, and dispose of biological and therapeutic agents and sharps, pesticides, and hazardous waste and material according to OSHA	<ul> <li>OSHA hazardous materials disposal requirements</li> <li>Biohazard/Sharps</li> <li>Biologics</li> <li>State requirements of disposal of animal biologics</li> <li>Suspected zoonoses disposal and handling of samples</li> </ul>
5.17 Explain human bloodborne pathogens protocols	<ul><li>PPE</li><li>Precautions of administering first-aid</li></ul>
5.18 Describe bite case protocol and procedures for staff and patient	<ul> <li>Incident reports (internal vs. external)</li> <li>Rabies quarantine</li> <li>City/County ordinance</li> </ul>
STANDARD 7.0 APPLY ANIMAL BEHAVIORAL ASSESSMENT AND REST	RAINT TECHNIQUES
7.1 Demonstrate kenneling protocols (i.e., placing and removing small animals from upper and lower cages/kennels, safety, comfort, husbandry, aggression, etc.)	<ul> <li>Body mechanics</li> <li>Restraint equipment</li> <li>Recognizing animal body language</li> <li>Canine vs. feline</li> <li>Assess the patient's emotional state and adjust handling accordingly</li> </ul>
7.2 Determine appropriate restraint techniques based on behavioral assessment, size, weight, and compromised status (table or floor)	<ul> <li>Body mechanics</li> <li>Restraint equipment</li> <li>Recognizing animal body language</li> <li>Canine vs. feline</li> <li>Assess the patient's emotional state and adjust handling accordingly</li> </ul>
7.3 Apply appropriate safety equipment (e.g., safety muzzle, Elizabethan collar, and resistant pole)	<ul> <li>Types of and applying muzzles (safety muzzle)</li> <li>Nylon dog</li> <li>Nylon cat</li> <li>Plastic cat</li> <li>Brachycephalic</li> <li>Gauze</li> <li>Leash</li> <li>Recognize contraindications for types of muzzles</li> <li>Elizabethan collar</li> </ul>

	<ul><li>Resistant pole (rabies pole)</li><li>Specialty restraint equipment</li></ul>
7.4 Demonstrate canine restraint positions (e.g., standing, sitting, lateral, sternal, and dorsal)	<ul> <li>Standing</li> <li>Sitting</li> <li>Lateral</li> <li>Sternal</li> <li>Dorsal</li> <li>Environmental/Client influences</li> </ul>
7.5 Demonstrate feline handling and restraint techniques	<ul> <li>Sitting</li> <li>Lateral vs. stretch</li> <li>Sternal</li> <li>Dorsal</li> <li>Kitty burrito</li> <li>Scruff</li> <li>Environmental/Client influences</li> </ul>
7.6 Restrain equine (e.g., halter, tie, and lead horses)	<ul> <li>Restraint and low stress handling tools/equipment for equine         <ul> <li>Halter and lead rope (lead horses)</li> <li>Chain lead application</li> <li>Tie</li> <li>Twitch (lip vs. shoulder roll)</li> </ul> </li> <li>Flight zones</li> <li>Assistant on the same side as DVM</li> </ul>
7.7 Recognize dog breeds, cat breeds, and common equine breeds (i.e., American Kennel Club (AKC), Cat Fanciers' Association (CFA), etc.)	<ul><li>AKC dog</li><li>CFA cat</li><li>Equine breeds</li></ul>
7.8 Identify the gender of small animal species, particularly felines	<ul><li>Anogenital distance</li><li>Species with apparent vs. hidden anatomy</li></ul>
7.9 Differentiate between normal and abnormal animal behavior (i.e., irritability, fear, agnostic aggression, etc.)	<ul><li>Animal body language</li><li>Types of aggression</li><li>Adapt restraint/handling</li></ul>
7.10 Assist in the collection of blood samples by providing appropriate restraint	<ul><li>Cephalic</li><li>Saphenous (medial vs. lateral)</li></ul>

	<ul><li>Jugular</li><li>Individualized restraint</li></ul>
STANDARD 12.0 DESCRIBE IMAGING TECHNIQUES AND SAFETY PRACT	TICES
12.1 Describe procedures to assist in the completion of diagnostic radiographs and ultrasound including preparation, restraint, and positioning of patients	<ul> <li>Radiology restraints</li> <li>State legalities for staff performing radiographs</li> <li>Ultrasound restraint positions</li> <li>Positioning aids (sandbags, trough, etc.)</li> <li>Inhalation/Exhalation</li> <li>Sedation</li> <li>Serial radiographs (metastatic, barium series, etc.)</li> </ul>
12.2 Explain quality control procedures related to radiation protection (i.e., clothing, dosimetry badges, etc.) in accordance with Arizona Radiation Regulatory Agency (ARRA) Article 4. Standards for Protection against Ionizing Radiation R12-1-401 thru 409	<ul> <li>Semi-annual RadPPE Integrity</li> <li>Dosimetry badges- use, maintenance, storage, and control badge</li> <li>Light field alignment/collimation</li> <li>Dark room quality</li> </ul>
12.3 Label, file, and store film and radiographs	<ul> <li>Methods of filing (alphabetical/client ID)</li> <li>Labeling requirements (physical film vs. film storage)</li> <li>Record retention</li> <li>Radiology log</li> </ul>
12.4 Demonstrate proper care of radiography equipment	<ul> <li>Semi-annual RadPPE Integrity</li> <li>Annual quality control- checking machine for scatter</li> </ul>
12.5 Demonstrate procedures for care and maintenance of film cassettes and screens	<ul><li>Cleaning</li><li>Storage</li><li>Maintenance</li><li>Replacement</li></ul>
12.6 Explain safety precautions for handling processing chemicals	<ul> <li>PPE</li> <li>State legal requirements for staff radiation exposure</li> <li>OSHA</li> <li>SDS</li> </ul>
12.7 Differentiate among manual, automatic, and digital radiographic processing	Compare and contrast manual, automatic, and digital

12.8 Maintain X-ray Log in accordance with X-ray log, AZ Vet Med
Examining Board Administrative Rules R3-11-502, M.

- Computerized vs paper log
- Az Radiation Board legal requirements for Xray Log

# Domain 3: Diagnostic Procedures and Treatment Skills Instructional Time: 25-35%

#### STANDARD 6 0 APPLY PRINCIPLE OF PHARMACY AND PHARMACOLOGY

STANDARD 6.0 APPLY PRINCIPLE OF PHARMACY AND PHARMACOLOGY	
6.1 Recognize DEA standards involving all controlled and non-controlled substances in accordance with Article 7. 32- 2281 Dispensing of drugs and devices; Article 8. Drug Dispensing R3-11-801 thru R3-11-807; R3-11-502 K. Controlled drug log; and 32-1901 Controlled/non-controlled	<ul> <li>Drug schedules</li> <li>Drug log (intake, usage, disposal)</li> <li>Inventory</li> <li>DEA requirements/forms</li> <li>Handling/Filling procedures</li> <li>Client/Staff drug abuse</li> </ul>
6.2 Compare and contrast types and groups of drugs using proper terminology	<ul> <li>Generic vs. name brand</li> <li>Over the counter, prescribed, and controlled</li> <li>Medication groups (i.e., sedatives, antibiotics, pain medications, etc.)</li> <li>Concentrations</li> <li>Suspensions, tablets, capsules, liquid, injectable</li> </ul>
6.3 Differentiate between prescription drugs from over-the-counter drugs	<ul> <li>Supplements</li> <li>Prescription diets</li> <li>Nutraceuticals</li> <li>Doctor approved prescriptions</li> </ul>
6.4 Demonstrate prescription labeling requirements including expiration dates	<ul><li>Label requirements</li><li>Facility requirements</li></ul>
6.5 Reconstitute vaccines and/or medications according to protocol	<ul> <li>Vaccination schedules for young, adult, and geriatric canine and feline patients</li> <li>Core vs. non-core</li> <li>Storage and handling procedures</li> <li>Individual facility protocol</li> </ul>

6.6 Describe possible routes of drug and/or vaccine administration (i.e., intranasal, intramuscular, oral, topical, etc.)	<ul> <li>IV, IM, SQ, PO absorption, uses and contraindications</li> <li>Medication forms (tablet, capsule, liquid, injectable, etc.)</li> </ul>
6.7 Prepare a prescription based on the doctor's orders	<ul> <li>Medication abbreviations</li> <li>Labeling requirements</li> <li>Documentations/Initialing</li> <li>In-house refills vs. pharmacy refills</li> </ul>
6.8 Communicate prescription instructions	<ul> <li>Client education</li> <li>Contraindications</li> <li>Side effects</li> </ul>
STANDARD 8.0 PERFORM PATIENT CARE	
8.1 Determine and record temperature, pulse, respiration, mucous membrane color, capillary refill time (CRT), body condition score, and weight of patients (e.g., convert lbs to kg and kg to lbs)	<ul> <li>Determine vitals using clock/watch with a second hand</li> <li>Wt. TPR, MM, CRT</li> <li>BCS: scales, 5 or 9</li> <li>Normal vs. abnormal values</li> <li>Convert lbs to kg, kg to lbs, and oz to lbs</li> </ul>
8.2 Express anal glands using the external method	<ul> <li>Normal anal sac structure/location</li> <li>PPE, supplies</li> <li>Anal gland expression procedure</li> <li>Cleaning</li> <li>Purpose</li> <li>Internal vs. external method</li> </ul>
8.3 Perform exam room grooming (e.g., trimming nails, cleaning external ear canal, sanitary trimming, and therapeutic bathing)	<ul> <li>Recognizing equipment for exam room grooming (clippers, nail trimmers, etc.)</li> <li>Sanitary trimming</li> <li>Trimming nails</li> <li>Cleaning external ear canal</li> <li>Therapeutic bathing (medicated vs. unmedicated)</li> </ul>
8.4 Explain small animal nutritional requirements, pet food labeling standards, dry matter basis calculations, and the differences between pet food products	<ul> <li>AAFCO</li> <li>Dry food vs. wet food</li> <li>Labeling requirements</li> <li>Dry matter calculations</li> </ul>

	<ul> <li>General species requirements (i.e., cats are obligate carnivores, need taurine)</li> <li>Kcal requirements</li> </ul>
8.5 Apply medication using the eye or ear route	<ul> <li>Assess restraint if needed</li> <li>Administer medication</li> <li>Medical abbreviations</li> </ul>
8.6 Perform routine recordkeeping and observation of hospitalized patients (e.g., input and output when cleaning and feeding)	<ul> <li>Facility policy</li> <li>Assessment of patient at regular intervals</li> <li>Recording assessment in progress notes</li> <li>Vitals</li> <li>Input and output when cleaning and feeding</li> <li>Treatment sheet (according to facility policy)</li> </ul>
8.7 Prepare supplies needed for fluid therapy	<ul> <li>Facility policy</li> <li>Assessment of patient at regular intervals</li> <li>Recording assessment in progress notes</li> <li>Vitals</li> <li>Input and output when cleaning and feeding</li> <li>Treatment sheet (according to facility policy)</li> </ul>
8.8 Administer oral medications, liquid and pills, for canines and felines	<ul> <li>Syringe vs dropper</li> <li>Verification of medication dose</li> <li>Patient and staff safety</li> <li>Restraints</li> <li>Specialty medication administration (i.e., activated charcoal, barium, etc.)</li> <li>Explain possible hazards</li> </ul>
8.9 Perform IV catheter removal	<ul> <li>Remove IV catheter</li> <li>Place superficial pressure bandage</li> <li>Remove superficial bandage</li> </ul>
8.10 Perform pressure bandage application and removal	<ul> <li>Place superficial pressure bandage</li> <li>Remove superficial bandage</li> <li>When to apply/Application requirements</li> </ul>

8.11 Compare and contrast bandage types and materials used for each (e.g., cast padding, stretch gauze, Telfa™ pad, self-adherent bandage wrap, medical tape, and elastic tape)	<ul> <li>Bandage types/Layers of bandaging</li> <li>Indications for various bandage types</li> <li>Identify bandage materials         <ul> <li>Bandaging hazards</li> <li>Cast padding</li> <li>Stretch gauze</li> <li>Telfa™ pad</li> <li>Self-adherent bandage wrap</li> <li>Medical tape</li> <li>Elastic tape</li> </ul> </li> </ul>
8.12 Prepare food and prescription diets according to special dietary needs	<ul> <li>Verify patient diet</li> <li>Measure food quantities</li> <li>Recognize OTC vs. RX diets</li> <li>Documentation</li> <li>Calculate kcal requirements</li> </ul>
8.13 Provide care and maintenance of medical equipment and supplies (e.g., IV drip counter, water blanket, and bedding)	<ul> <li>Required maintenance of veterinary equipment- quality control</li> <li>Routine cleaning of veterinary equipment (i.e., otoscope, IV drip counter, water blanket, stethoscope, etc.)</li> <li>Frequent monitoring of patient bedding</li> </ul>
8.14 Explain basic husbandry for birds, rabbits, pocket pets, reptiles, and other exotics	Husbandry of avian, pocket pets, rabbits, reptiles
8.15 Recognize abnormal patient health status (i.e., seizure, shock, ataxia, dyspnea, etc.)	<ul> <li>Vital abnormalities</li> <li>Recognize physical symptoms of medical emergencies</li> </ul>
8.16 Recognize and respond appropriately to common veterinary medical emergencies by notifying the appropriate hospital personnel	<ul> <li>Common medical emergencies</li> <li>Sever bleeding</li> <li>Choking</li> <li>Bleeding from extremities</li> <li>Inability to urinate or pass feces</li> <li>Injuries to eyes</li> <li>Poison</li> <li>Seizures</li> <li>Severe lameness</li> </ul>

8.17 Explain the process of euthanasia and postmortem care in accordance with ARS Article 3. 32-2240.01 Burial in landfill; Article 8. 32-2291-32-2296 Licensure of Animal Crematories; in accordance with Arizona Veterinary Medical Examining Board Administrative Rules and Procedures Article 10. R3-11-1001 thru 1010 Animal Crematory Minimum Standards, and Standards of Practice, F. R311-502	<ul> <li>Minimal pain and distress to animal</li> <li>Postmortem care         <ul> <li>Cause of death</li> </ul> </li> </ul>
8.18 Demonstrate appropriate procedure for disposal of deceased animals in accordance with Article 8. 32-2291 Disposal of deceased animals; Minimum standards for animal crematories Rules R3-11-1001 thru 1010, and R3-11-701, 5. Defining adequate refrigeration for deceased	Burial vs. cremation
STANDARD 9.0 ASSIST WITH SURGICAL PREPARATION AND PROCEDUR	RES
9.1 Prepare surgical equipment and supplies based on surgical procedure and veterinarian preferences	<ul> <li>Prepare anesthesia machine, monitors and fluid pump</li> <li>Surgery supplies (gown, pack, suture, etc.)</li> <li>Room set-up</li> <li>Emergency equipment</li> <li>Oxygen</li> <li>Scavenger</li> </ul>
9.2 Sterilize instruments and sanitize supplies	<ul> <li>Steam, gas, cold sterilization</li> <li>PSI, temperature, and time</li> <li>Methods and supplies</li> <li>Verification of sterilization</li> </ul>
9.3 Identify different sterilization techniques (i.e., steam, dry heat, gas, cold sterile, etc.)	Steam, gas, cold sterilization, dry heat
9.4 Operate and maintain autoclaves	<ul> <li>Weekly and monthly maintenance</li> <li>Function and settings</li> <li>Safety</li> </ul>
9.5 Identify common surgical instruments	<ul><li>Common uses and procedures</li><li>Instrument care</li></ul>
9.6 Identify common suture materials, types, and sizes	Absorbable, non-absorbable, braided, monofilament, sizes, taper needle, cutting needle, and reverse cutting needle

9.7 Assist the veterinarian and/or veterinary technician with the preparation of patients using aseptic techniques	<ul> <li>Surgical scrub techniques</li> <li>Surgical clipping according to procedure</li> <li>Aseptic patient transfer</li> </ul>
9.8 Assist in positioning surgical patients	<ul> <li>Assess positioning and tie down based on the surgical procedure</li> </ul>
9.9 Aid the veterinarian and/or veterinary technician with physical monitoring of recovering surgical patients	<ul> <li>Normal vs. abnormal recovery</li> <li>Vitals</li> <li>Monitoring equipment</li> <li>Staff safety</li> <li>Signs of pain/Patient advocacy</li> </ul>
9.10 Maintain the Surgical Log in accordance with R3-11-502 Standards of Practice H. 1 thru 5 Anesthesia Log (separate from controlled drug log)	<ul><li>Legal requirements</li><li>Paper vs. computerized</li></ul>
9.11 Maintain proper operating room conduct and asepsis (e.g., PPE, sanitation, movement, and care)	<ul> <li>Proper movement in, out, and around surgery room</li> <li>PPE</li> <li>Sanitation</li> <li>Care</li> </ul>
9.12 Perform post-surgical cleanup using hazardous waste procedures	<ul> <li>Proper disposal of biohazard material</li> <li>Proper disinfection protocol</li> <li>Anesthesia machine maintenance (soda lime, anesthetic gas level, oxygen)</li> </ul>
9.13 Fold and wrap surgical gowns, drapes, and packs	<ul> <li>Fold gowns and drapes to maintain sterility</li> <li>Wrap individual instruments</li> <li>Verification of sterilization</li> <li>Proper labeling</li> </ul>
STANDARD 10.0 ASSIST WITH LABORATORY PROCEDURES AND PREPARE SPECIMENS	
10.1 Collect voided urine and fecal samples	<ul> <li>Storage</li> <li>Refrigeration</li> <li>Fecal score</li> <li>Collection techniques (mid-stream, cysto, cath, fecal loop)</li> <li>PPE</li> </ul>

	Patient labeling
10.2 Determine physical properties of urine including color and clarity	Urine color, clarity, turbidity
10.3 Prepare supplies for blood draw	<ul> <li>Appropriate needle and syringe size</li> <li>Appropriate collection container (tube)</li> <li>Pressure bandage material (as needed)</li> </ul>
10.4 Compare and contrast common blood tubes used in veterinary medicine	<ul> <li>Additives in blood tubes</li> <li>Common tests requiring special additives</li> <li>Tube fill order</li> <li>Specialty instructions</li> <li>Labeling</li> </ul>
10.5 Collect voided fecal samples for examination	<ul> <li>Fecal score</li> <li>Storage</li> <li>PPE</li> <li>Labeling</li> </ul>
10.6 Prepare fecal flotation solutions and set up fecal flotations and direct smears	<ul><li>Supplies/Equipment</li><li>Steps</li><li>PPE</li></ul>
10.7 Describe necropsy procedures	<ul><li>Sample preparation/packaging</li><li>Sample submission</li><li>Body after-care</li></ul>
10.8 Recognize clinical signs of suspected rabies cases and notify correct personnel	<ul><li>Signs and symptoms</li><li>City and county ordinance</li></ul>
10.9 Explain procedures for handling rabies samples safely in accordance with Compendium of Animal Rabies Prevention and Control (Arizona Manual for Rabies Control and Bite Management azdhs.gov. Federal—cdc.gov)	<ul> <li>PPE</li> <li>Sample preparation and packaging</li> <li>Quarantine protocols</li> <li>Proper forms</li> <li>Care of body</li> <li>Personal exposure/Rabies vaccinations</li> </ul>
10.10 Identify external parasites (e.g., mites, lice, fleas, and ticks)	Mites     Lice

	<ul><li>Fleas</li><li>Ticks</li></ul>
10.11 Assist in the preparation of various specimen staining techniques	<ul><li>Diff-Quick</li><li>Gram Stain</li><li>Urine Sedi-stain</li></ul>
10.12 Compare and contrast preparation procedures of in-house lab vs reference lab sample submission	<ul> <li>Sample storage</li> <li>Sample preparation (submission forms etc.)</li> <li>Common in house vs. reference lab tests</li> <li>Specialty testing</li> </ul>
10.13 Confirm that laboratory results are accurately recorded	Verification process
10.14 Maintain Laboratory Log	<ul> <li>Computerized vs. paper log</li> <li>Facility policy</li> </ul>

Domain 4: Body Systems Instructional Time: 5 -10%	
STANDARD 11.0 REVIEW THE BODY SYSTEMS	
11.1 Describe the function and structure of the Integumentary System	<ul><li>Structures</li><li>Functions</li><li>Common diseases</li></ul>
11.2 Describe the function and structure of the Musculoskeletal System	<ul><li>Structures</li><li>Functions</li><li>Common diseases</li></ul>
11.3 Describe the function and structure of the Circulatory System	<ul><li>Structures</li><li>Functions</li><li>Common diseases</li></ul>
11.4 Describe the function and structure of the Respiratory System	<ul><li>Structures</li><li>Functions</li><li>Common diseases</li></ul>

11.5 Describe the function and structure of the Gastrointestinal System	<ul><li>Structures</li><li>Functions</li><li>Common diseases</li></ul>
11.6 Describe the function and structure of the Urinary System	<ul><li>Structures</li><li>Functions</li><li>Common diseases</li></ul>
11.7 Describe the function and structure of the Nervous System	<ul><li>Structures</li><li>Functions</li><li>Common diseases</li></ul>
11.8 Describe the function and structure of the Endocrine System	<ul><li>Structures</li><li>Functions</li><li>Common diseases</li></ul>
11.9 Describe the function and structure of the Reproductive System	<ul><li>Structures</li><li>Functions</li><li>Common diseases</li></ul>
11.10 Describe the function and structure of the Sensory System	<ul><li>Structures</li><li>Functions</li><li>Common diseases</li></ul>
11.11 Describe the function and structure of the Immune System	<ul><li>Structures</li><li>Functions</li><li>Common diseases</li></ul>

