# The Academy of Veterinary Technicians in Clinical Practice



## Small Animal CANINE/FELINE Application Packet 2017 Case Year

## **AVTCP Small Animal (CANINE/FELINE)**

## **CASE LOGS – Additional Instructions/Guidelines**

- A body condition score (BCS) is required in each case log entry. A 9-point BCS scale is recommended, but 5-point is acceptable.
- A numerical pain score is required in each case log entry. The use of the Colorado State University (CSU) Canine or Feline Acute Pain Scale is recommended, but not required.

## **CASE REPORTS – Additional Instructions/Guidelines**

- A body condition score (BCS) is required in each case report. A 9-point BCS scale is recommended, but 5-point is acceptable.
- A numerical pain score is required in each case report. The use of the Colorado State University (CSU) Canine or Feline Acute Pain Scale is recommended, but not required.

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## **KNOWLEDGE LIST**

Knowledge of disease processes should include: causes, symptoms, modes of transmission, proper testing, treatment options, and prognosis.

#### 1. Urinary

- a. Normal anatomy and physiologic processes
- b. Renal failure (acute/chronic)
- c. Urinary tract infections
- d. FLUTD
- e. Urolithiasis bladder and kidney
- f. Incontinence
- g. Cystitis
- h. Transitional Cell Carcinoma (TCC)
- i. Pyelonephritis
- j. Polycystic kidney disease
- k. Urinary obstruction
- 1. Prostate disease
- m. Ectopic ureters
- n. Protein losing nephropathy

#### 2. Hepatobiliary

- a. Normal anatomy and physiologic processes
- b. Feline hepatic lipidosis
- c. Hepatitis (acute/chronic), cholangiohepatitis
- d. Hepatic encephalopathy
- e. Portosystemic shunts (congenital vascular anomaly)
- f. Copper storage disease
- g. Hepatic neoplasia
- h. Gallbladder mucocele
- i. Cholecystic disease
- j. Biliary cysts
- k. Bile duct obstruction
- 1. Toxic hepatopathy

#### 3. Gastrointestinal

- a. Normal anatomy and physiologic processes
- b. Vomiting/regurgitation
- c. Diarrhea (acute/infectious)
- d. Constipation/obstipation
- e. Esophageal strictures
- f. Megaesophagus
- g. Megacolon
- h. Pyloric outflow obstructions
- i. Gastric ulcers/erosions
- j. Small bowel disease
- k. Large bowel disease

- 1. Inflammatory bowel disease
- m. Gastric dilation-volvulus (GDV)
- n. Colitis/gastritis
- o. Acute hemorrhagic diarrhea syndrome (AHDS)
- p. Malabsorption syndromes
- q. Gastrointestinal neoplasia
- r. Triaditis (cats)
- s. Foreign body/ obstruction/ileus
- t. Intussusception
- u. Neoplasia of the oral cavity
- v. Stomatitis lymphocytic/plasmacytic
- w. Gastritis
- x. Bacterial disease
- y. Parasitic disease
- z. Refeeding syndrome
- aa. Infiltrative diseases
- bb. Protein losing enteropathy
- cc. Short bowel syndrome

#### 4. Endocrine/exocrine

- a. Normal anatomy and physiologic processes
- a. Hypothyroidism
- b. Hyperthyroidism
- c. Thyroid neoplasia
- d. Pancreatitis (acute and chronic)
- e. Exocrine pancreatic insufficiency
- f. Insulinoma
- g. Hypoadrenocorticism
- h. Hyperadrenocorticism (pituitary dependent vs. functional adrenal tumors)
- i. Diabetes mellitus (canine/feline)
- j. Diabetic ketoacidosis
- k. Pheochromocytoma
- 1. Diabetes insipidus
- m. Growth hormone disorder
- n. Hypoparathyroidism
- o. Hyperparathyroidism

#### 5. Reproductive

- a. Normal anatomy and physiologic processes
- b. Breeding/ reproduction techniques
- c. Neonatal care
- d. Prostatic disorders
- e. Dystocia
- f. Eclampsia
- g. Pyometra, metritis
- h. Uterine prolapse
- i. Mastitis
- j. False pregnancy
- k. Mammary tumors

#### 6. Immunological

- a. Normal anatomy and physiologic processes
- b. Immunoglobulins
- c. Immune mediated hemolytic anemia
- d. Immune mediated thrombocytopenia
- e. Vaccine reactions
- f. Feline leukemia
- g. Feline Immunodeficiency Virus
- h. Feline Infectious Peritonitis
- i. Systemic Lupus Erythematosus (SLE)
- j. Idiopathic polyarthritis

#### 7. Respiratory

- a. Normal anatomy and physiologic processes
- b. Upper respiratory tract infection
- c. Laryngeal paralysis
- d. Brachycephalic syndrome
- e. Tracheal collapse/stenosis
- f. Pneumonia (viral, bacterial, fungal)
- g. Pulmonary thromboembolism
- h. Epistaxis
- i. Feline asthma
- j. Pneumo/hemo/chylo/pyothorax
- k. Pleuritis/pleural effusion
- 1. Pulmonary edema
- m. Diaphragmatic hernia
- n. Feline respiratory disease complex
- o. Canine respiratory disease complex
- p. Neoplasia

#### 8. Cardiovascular

- a. Normal anatomy and physiologic processes
- b. Hypertension/hypotension
- c. Arterial thromboembolism, saddle thrombus
- d. Caval syndrome
- e. Arrhythmias
- f. CHF
- g. Cardiomyopathy (dilated & hypertrophic)
- h. Pericardial effusion
- i. Heartworm disease
- j. Congenital and inherited abnormalities
- k. Heart sounds and murmurs
- 1. PDA, AS, VSD
- m. Cardiac tamponade

#### 9. Neurogenic

- a. Normal anatomy and physiologic processes
- b. Seizures
- c. Vestibular disease
- d. Hydrocephalus
- e. Idiopathic epilepsy

- f. Cerebellar hypoplasia
- g. Laryngeal paralysis
- h. Neoplasia
- i. Intervertebral disk disease
- j. Horner's Syndrome
- k. Diabetic neuropathy
- 1. Degenerative myelopathy
- m. Myasthenia gravis
- n. Masticatory muscle myositis
- o. Wobblers
- p. GME
- q. Trauma
- r. Congenital

#### 10. Hematologic

- a. Normal anatomy and physiologic processes
- b. DIC
- c. von Willebrand disease (vWD)
- d. Hemophilia
- e. Anemia (regenerative/nonregenerative)
- f. Polycythemia
- g. Leukocytic disorders (leukemia, lymphoma, leukocytosis, leukopenia)
- h. Blood transfusions
- i. Platelet disorders (thrombocytopenia/thrombocytosis)
- j. Coagulopathies

#### 11. Dermatologic

- a. Normal anatomy and physiologic processes
- b. Flea allergic dermatitis (FAD)
- c. Atopy
- d. Allergy testing
- e. Otitis externa
- f. Auricular hematomas
- g. Food hypersensitivity
- h. Dermatophytosis
- i. Urticaria
- j. Pyoderma
- k. Neoplastic skin disease (e.g. mast cell tumors)
- 1. Perianal fistulas
- m. Anal sac disease
- n. Mange (sarcoptes, demodex)
- o. Cheyletiella
- p. Lick granulomas

#### 12. Ophthalmology

- a. Normal anatomy and physiologic processes
- b. Corneal Ulcers
- c. Prolapsed nictitans (cherry eye)
- d. Nuclear sclerosis
- e. Glaucoma
- f. Uveitis

- g. Cataracts
- h. Conformational abnormalities (entropion/ectropion)
- i. Conjunctivitis
- j. Neoplasia (adenocarcinoma, melanoma)
- k. Luxated Lens
- 1. Keratoconjunctivitis sicca (KCS)/dry eye

#### 13. Musculoskeletal

- a. Normal anatomy and physiologic processes
- b. Arthropathies (hip/elbow dysplasia, patellar luxation)
- c. Eosinophilic myositis
- d. Hypertrophic osteodystrophy
- e. Panosteitis
- f. Osteochondritis dissecans
- g. Joint trauma (Cranial cruciate ligament, hip luxation)
- h. Achondroplasia
- i. Osteosarcoma
- i. Leggs Perthes disease
- j. Nutritional osteodystrophies (rickets, osteomalacia)
- k. Shifting leg lameness
- 1. Osteoarthritis
- m. Degenerative joint disease (DJD)

#### 14. Nutritional

- a. Prevention and treatment of disease states
- b. Proper nutrition for life stages/ lifestyle
- c. Proper use and recommendations of veterinary diets
- d. Obesity/Malnutrition
- e. Parenteral/non-parenteral nutrition
- f. Calculating RER and disease state requirements

#### 15. Behavior

- a. Housetraining
- b. Crate training
- c. Destruction: Alternatives to declawing
- d. Food aggression
- e. Separation anxiety
- f. House soiling/spraying
- g. Basic obedience
- h. Puppy / kitten play-biting/ aggression

#### 16. Fluid and electrolyte disorders

- a. Dehydration/overhydration
- b. Acid-base abnormalities
- c. Electrolyte abnormalities

#### **17. Infectious disease**

- a. Sanitation protocols
- b. Bacterial
- c. Fungal
- d. Viral

e. Parasitic

#### 18. Toxins

- a. Ethylene glycol
- b. Common NSAIDS
- c. Topical pesticides (organophosphates, pyrethrins, etc.)
- d. Common food toxins (chocolate, grapes, onion, xylitol, etc.)
- e. Rodenticides
- f. Common household plants (lily, spider plant, holly, poinsettia, etc.)
- g. Alcohol, nicotine, illicit drugs
- h. Unknown toxin management
- i. Snakebite

#### **19. Dentistry**

- a. Normal anatomy and physiologic processes
- b. Disease grading system
- c. Proper dental radiographic technique
- d. Triadan numbering system/dental formula
- e. Malignant oral neoplasms (squamous cell carcinoma, oral melanoma)
- f. Tooth root abscess
- g. Oronasal fistulas
- h. Epulides
- i. Supernumerary teeth
- j. Retained deciduous teeth

**20.** Pharmacology – Recognize groups of drugs, their mechanisms, and clinically relevant side effects.

- a. Proper administration practices
- b. Medication calculations; use of weights and measures
- c. Fluid delivery systems
- d. Monitor therapeutic response
- e. Antibiotics
- f. Anti-inflammatories
- g. NSAIDS
- h. Controlled Drugs
- i. Chemotherapeutics
- j. Antifungals
- k. Anthelmintics
- 1. Antiseptics/disinfectants
- m. Ectoparasiticides
- n. Vaccines
- o. Anticonvulsants

#### 21. Office Hospital Procedures

- a. Veterinary laws, regulation, and ethics
- b. Legal documentation and record keeping
- c. Controlled substance requirements
- d. Management of inventory control
- e. Disposal of hazardous materials
- f. Equipment and facility management
- g. Outstanding interpersonal and public relations interaction

## **AVTCP Small Animal (CANINE/FELINE)**

### SUGGESTED READING LIST

**McCurnin's Clinical Textbook for Veterinary Technicians**. 8<sup>th</sup> ed. Joanna M. Bassert and John Thomas. Saunders. 2013. ISBN: 1437726801

**Merck Veterinary Manual**. 11<sup>th</sup> ed. Cynthia M. Kahn and Scott Line. Wiley. 2016. ISBN: 978-0911910612

**Mosby's Comprehensive Review for Veterinary Technicians**. 4<sup>th</sup> ed. Monica M. Tighe and Marg Brown. Elsevier. 2014. ISBN: 9780323171380

**Saunders Comprehensive Veterinary Dictionary**. 4<sup>th</sup> ed. V. P. Studdert, C. C. Gay, D. C. Blood. Elsevier. 2012. ISBN: 978-0-7020-4743-5

**Veterinary Technicians Daily Reference Guide: Canine and Feline**. 3<sup>rd</sup> ed. C Jack, P Watson, V Heeren. Wiley. 2014. ISBN: 9781118810620

Fluid Therapy for Veterinary Nurses and Technicians. Paula Hotston Moore. Butterworth-Heinemann. 2003. ISBN: 0750652837

Fluid Therapy for Veterinary Technicians and Nurses. Charlotte Donohoe. Wiley. 2012. ISBN: 978-0-8138-1484-1

**Nutrition and Disease Management for Veterinary Technicians and Nurses**. 2<sup>nd</sup> ed. Ann Wortinger and Kara Burns. Wiley-Blackwell. 2015. ISBN: 2901118509271

Small Animal Internal Medicine for Veterinary Technicians and Nurses. Linda Merrill. Wiley-Blackwell. 2012. ISBN: 9780813821641

**Small Animal Emergency and Critical Care: A Manual for Veterinary Technicians.** 3<sup>rd</sup> ed. Andrea Battaglia and Andrea Steele. Saunders. 2016. ISBN: 978-0323227742

Veterinary Technician's Manual for Small Animal Emergency and Critical Care. Christopher Norkus. Wiley-Blackwell. 2011. ISBN: 0813810574

**Anesthesia and Analgesia for Veterinary Technicians.** 5<sup>th</sup> ed. John A. Thomas and Philip Lerche. Elsevier. 2016. ISBN: 978-0323249713

Anesthesia for Veterinary Technicians. Susan Bryant (editor). Wiley. 2010. ISBN: 978-0-8138-0586-3

Veterinary Anesthesia and Analgesia. Diane McKelvey and K. Wayne Hollingshead. Mosby. 2003. ISBN: 0323019889

Anaesthesia for Veterinary Nurses. 2<sup>nd</sup> ed. Liz Welsh. Wiley-Blackwell. 2009. ISBN: 978-1-4051-8673-5

Lavin's Radiography for Veterinary Technicians. 5<sup>th</sup> ed. Marg Brown and Lois Brown. Saunders. 2014. ISBN: 9781455722808

**Small Animal Dental Procedures for Veterinary Technicians and Nurses.** Jeanna R. Perrone. Wiley. 2012. ISBN: 978-0-8138-2075-0

**Plumb's Veterinary Drug Handbook**, Donald C. Plumb, 8<sup>th</sup> ed. Wiley-Blackwell. 2015. ISBN: 978-1-118-91193-8

**Applied Pharmacology for the Veterinary Technician**. 5<sup>th</sup> ed. Boyce P. Wanamaker and Kathy Massey. Saunders. 2015. ISBN: 9780323186629

## AVTCP Small Animal (CANINE/FELINE) Skills List

A minimum of 80% of the skills must be mastered. Skills must be demonstrated and cross referenced in your case logs. Items denoted with an \*\* are considered mandatory skills and must be completed.

Skill	Case Log Number(s)	Signature of Veterinarian or VTS
General Nursing		
<ol> <li>Perform a comprehensive physical exam on at least ONE dog and ONE cat. Examination of multiple life stages (juvenile, adult, and geriatric) is encouraged. Assess and document findings including weight, temperature, heart rate, pulse rate, respiratory rate, heart/lung sounds, BCS, numerical pain score, hydration status, and any abnormal findings. **</li> </ol>		
2. Recognize and document signs of respiratory failure and/or shock.		
3. Accurately and efficiently triage patients presenting for emergent conditions. Document presenting condition, observations, vitals, and steps taken in response in patient status.		
<ol> <li>In association with other medical team members, administer CPR, evaluate effectiveness, and institute therapy. Adherence to current RECOVER CPR guidelines is strongly encouraged.</li> </ol>		
5. Demonstrate knowledge of substances/items that, when ingested, result in toxicity/foreign body and appropriate interventions.		
6. Demonstrate efficient and accurate calculation of drug doses, IV fluid rates, and constant rate infusions (CRIs). Calculations must be included in log. **		
<ol> <li>Demonstrate thorough knowledge of metric conversions using both kg and m<sup>2</sup>. Calculations must be included in log.</li> </ol>		
8. Demonstrate mastery of venipuncture in healthy, sick and/or debilitated canine and feline patients in a variety of locations. Log location.		
9. Demonstrate mastery of peripheral IV catheter placement in a variety of sites in healthy, sick and/or debilitated canine and feline patients and demonstrate proper care and use of the catheter and IV line. Log at least two different locations.		
10. Demonstrate central line, PICC, and/or jugular catheter placement in a canine/feline patient and demonstrate proper care and use of the catheter and IV line.		
11. Demonstrate arterial catheter placement in a canine/feline patient and demonstrate proper care and use of the catheter and IV line.		
12. Demonstrate through the needle catheter placement in a canine/feline patient and demonstrate proper care and use of the catheter and IV line.		
13. Demonstrate intraosseous catheter placement in a canine/feline patient and demonstrate proper care and use of the catheter and IV line.		
14. Set up and maintain an IV fluid pump, be able to troubleshoot equipment malfunction, note administration problems, and take corrective measures. Log details.		

15. Set up and maintain a syringe pump, be able to troubleshoot equipment malfunction, note administration problems, and take corrective measures. Log details.	
<ol> <li>Administer crystalloids and/or colloids, monitor administration, and adjust administration in response to therapy and patient status.</li> </ol>	
<ol> <li>Administer blood or blood products, monitor administration and adjust administration as required. Log component used, monitoring, and any intervention required.</li> </ol>	
<ol> <li>Demonstrate mastery of cystocentesis in both the canine and feline, either blind or ultrasound guided. Log any adverse events if indicated (e.g. vagal response, hemorrhage, uroabdomen, etc.).</li> </ol>	
19. Demonstrate proficiency in urinary catheter placement in a canine and/or feline.	
20. Demonstrate proficiency in urinary catheter maintenance in a canine and/or feline.	
21. Set up and perform diagnostic non-invasive blood pressure measurement in a canine and a feline patient. Specify the method used (oscillometric, Doppler, etc.) and log values.	
22. Set up and perform diagnostic invasive blood pressure measurement via pressure transducer or aneroid manometer in a canine and/or feline patient. Specify the steps performed and log values.	
23. Set up and perform a diagnostic ECG. Log heart rate and rhythm.	
24. Recognize normal and abnormal ECG tracings. Log observed arrhythmia.	
25. Demonstrate mastery of proper wound management techniques and/or bandage placement. Log at least 2 different wounds/bandages - specifying location and bandage type (supportive, protective, wet to dry, etc.).	
26. Demonstrate mastery of proper application of splints. Log location and type.	
<ol> <li>Accurately and efficiently perform ocular diagnostic tests (including tonometry, fluorescein staining and/or Schirmer tear test). Log at least TWO tests.</li> </ol>	
<ol> <li>Determine nutritional requirements for different life stages, life styles, and disease processes in the canine and feline. Log calculations.</li> </ol>	
<ol> <li>Calculate and administer nutritional support through a variety of techniques (assisted feeding, feeding tubes, parenteral nutrition, etc.). Log calculations.</li> </ol>	
30. Demonstrate proper placement and/or maintenance of at least TWO of the following types of enteral feeding tubes: nasogastric, nasoesophageal, orogastric, esophagostomy, or PEG. Include feeding tube maintenance and tube feeding protocols.	
31. Administer thoracic physiotherapy to a canine and/or feline (nebulization, coupage, etc.)	
32. Demonstrate proficiency in appropriately performing in TWO rehabilitation techniques including massage therapy, cryo/heat therapy, range of motion, low level laser therapy, etc. Specify laser class and appropriate PPE if indicated.	
33. Demonstrate proper nursing care techniques for the recumbent patient including passive range of motion, urinary bladder care, proper bedding, safe manipulation of position, etc.	
34. Demonstrate proper isolation procedures, care of isolation suite, and isolation protocols.	
<ol> <li>Demonstrate proper nursing care of neonates in the hospital setting. Log all nutritional interventions and techniques.</li> </ol>	
Anesthesia/ Analgesia	

36. Assign appropriate ASA status after reviewing patient history, PE, and diagnostic results in collaboration with a veterinarian. Log the justification for your choice.	
37. Assign appropriate numerical pain score after reviewing patient history and physical examination in conjunction with evaluation of any prescribed analgesic plans to provide effective pain management. Log the justification for your choices.	
38. Develop anesthetic and peri-anesthetic protocols for veterinarian review and implementation to provide effective pain management and maximum anesthetic safety and effectiveness. Log the justification for your choices.	
39. Perform regional nerve blocks (dental, biopsy site, testicular, or linea). Demonstrate a variety of locations.	
40. Evaluate the effects of common pre-anesthetic, induction, and maintenance drugs. Describe evaluation and results in log.	
41. Evaluate and respond to adverse reactions to and/or complications from pre-anesthetic, induction, and anesthesia maintenance drugs.	
42. Implement appropriate pre-oxygenation technique and state rationale for need.	
43. Demonstrate mastery of endotracheal intubation and tube placement noting selection process in regard to length and size, and safe technique for sealing cuff.	
44. Set up a pulse oximeter, evaluate oxygen status, and if applicable note any abnormalities and corrective actions taken in log.	
45. Set up a capnograph end-tidal CO <sub>2</sub> monitor, evaluate ventilation status, and troubleshoot equipment malfunction. Log any abnormalities and appropriate interventions.	
46. Set up a continuous respiratory rate monitor, evaluate respiratory rate status, and troubleshoot equipment malfunction. Log any abnormalities and appropriate interventions.	
47. Set up and monitor core body temperature (esophageal or rectal), evaluate patient status, and troubleshoot equipment malfunction. Log any abnormalities and appropriate interventions.	
48. Implement techniques to prevent hypothermia/hyperthermia and resolve these issues by safely and effectively using devices such as warm air blankets, circulating water blankets, and IV fluid warmers. Log type of warming device used.	
49. Monitor and evaluate patient status and anesthetic depth using established parameters such as outward involuntary physical responses (i.e., jaw tone, palpebral reflex, eye position), blood pressure, ECG, pulse oximetry, heart rate, respiratory rate, and ventilation status.	
50. Administer and evaluate the effects of IV crystalloid and/or colloid therapy during anesthesia. Log any changes made to fluid therapy administration including rationale.	
51. Perform manual intermittent positive pressure ventilation with an ambu or anesthesia reservoir bag and evaluate its effectiveness.	
52. Demonstrate proficiency in the use of an mechanical anesthetic ventilator. Log technique and rationale for use, and troubleshoot equipment.	

53. Assess appropriate extubation time with regard to brachycephalics,	
regurgitation/aspiration, and emergence from anesthesia. Log any complications and appropriate interventions.	
54. Set up, test, and/or troubleshoot a rebreathing system. Log testing steps.	
55. Set up, test, and/or troubleshoot a non-rebreathing system. Log testing steps.	
56. Set up, test, and/or troubleshoot an anesthesia machine (oxygen tank/compressor, vaporizer, CO2 absorbent canister). Log testing steps.	
57. Set up, test, and/or troubleshoot a waste gas scavenging system. Log testing steps.	
Surgical Nursing	
58. Demonstrate extensive knowledge of and ability to set up necessary equipment and supplies for a variety of surgeries (i.e., reproductive tract, GI tract, ophthalmic, orthopedic, soft tissue, endoscopy, laparoscopy). Log at least FIVE different surgical procedures. **	
59. Coordinate the process of preparation and positioning of patients for a variety of surgical procedures (i.e., reproductive tract, GI tract, ophthalmic, orthopedic, soft tissue, endoscopy, laparoscopy). Log at least FIVE different surgical procedures.	
60. Coordinate the process of preparation, safe use, and maintenance of suction equipment, electrocautery, smoke evacuator, and/or surgical laser units.	
61. Demonstrate proper pre-operative nursing care of surgical patients. Log any abnormalities that may cause anesthetic complications.	
62. Demonstrate proper post-operative nursing care of surgical patients. Log any complications.	
63. Demonstrate the proper care of surgical instruments. Log instrument processing details.	
64. Demonstrate proper sterilization procedures (autoclave, ethylene oxide). Log instrument processing details.	
Laboratory	
65. Demonstrate mastery of all basic laboratory testing (PCV, TP, UA, fecal analysis, external parasite analysis, basic cytology, blood smear evaluation) and evaluation of results. All skills must be logged. **	
66. Utilize, run quality control (QC), and troubleshoot in-house hematology and clinical chemistry analyzers and evaluate results. Log equipment maintenance and QC.	
67. Demonstrate the ability to perform at least TWO different in-house clotting tests (BMBT, ACT, Platelet evaluation, PT, APTT).	
68. Demonstrate mastery of in-house blood typing and crossmatching.	
69. Demonstrate the ability to obtain samples for tests such as, but not limited to: ACTH stimulation test, HDDST, LDDST, thyroid testing, bile acids, cobalamin/folate, tli, pli, and therapeutic drug monitoring. Note appropriate fasting protocols, correct timing of sample collection, and correct sample collection and handling. Log at least THREE different tests.	
70. Properly collect and/or handle and process an arterial blood gas sample. Log details.	
71. Properly collect and/or handle and store samples of an excretion, secretion, or effusion for laboratory evaluation.	

72. Properly collect and/or handle, store, and submit cytology samples for laboratory evaluation. Log type of sample (i.e. FNA, direct, impression).	
<ul><li>73. Properly collect and/or handle, store, and submit samples for bacterial and/or fungal cultures. Log source and culture medium.</li></ul>	
74. Properly collect and/or handle, store, and submit samples for histopathology.	
Diagnostic Imaging	
75. Safely coordinate the radiographic process by directing team members to consistently and efficiently produce radiographs of diagnostic quality.	
76. Demonstrate proficiency in evaluating the patient's condition (medical, surgical, behavioral) and adapting the radiographic procedures to those conditions. Log any adaptations.	
77. Demonstrate accuracy, efficiency, and safety in positioning patients for a variety of radiographic studies (thorax, abdomen, spine, skull, extremity, shoulder, pelvis). Log at least FIVE different studies. **	
<ol> <li>Demonstrate accurate and consistent evaluation and modification of radiographic technique or positioning. Log results of evaluation and modification.</li> </ol>	
79. Perform and/or demonstrate the ability to set up and assist in contrast studies (i.e. GI studies, cystograms, myleograms) including the set up of necessary equipment, patient preparation, and administration of contrast media. Log any abnormalities9	
<ol> <li>Demonstrate the ability to set up, maintain equipment, and assist with or perform ultrasonography.</li> </ol>	
81. Demonstrate the ability to set up, maintain equipment, and assist with or perform advanced imaging techniques such as CT or MRI.	
Radioactive lodine	
82. Demonstrate proper radioactive iodine related techniques. Using proper protocols, perform and/or assist in the administration of radioactive iodine and provide appropriate inpatient care with established safety procedures. Log steps taken.	
83. Demonstrate radioactive iodine knowledge regarding pre- and post-administration client education and the maintenance of all appropriate facility records and logs to remain compliance with regulatory guidelines.	
Dentistry	
84. Demonstrate thorough knowledge of dental anatomy abnormalities demonstrated in proper dental charting. Log abnormalities and the type of dental chart used. **	
<ol> <li>85. Efficiently perform a comprehensive oral exam demonstrated in proper dental charting and notes.</li> </ol>	
86. Readily identify oral pathology and anatomic abnormalities.	
<ol> <li>Demonstrate proper use and care of dental hand instruments (including sharpening and instrument processing protocols) and power instruments.</li> </ol>	
88. Perform thorough and efficient dental prophylaxis.	
<ol> <li>Efficiently and consistently produce dental radiographs of diagnostic quality demonstrating bisecting angle and parallel techniques.</li> </ol>	
90. Set up, maintain and troubleshoot all dental equipment.	
Pharmacology	

91. Demonstrate extensive knowledge of groups of drugs, their mechanisms of action,		
clinically relevant side effects, and evaluation of therapeutic responses. Log drugs from		
at least THREE categories noting drug category, side effects, and therapeutic effect. **		
92. Demonstrate extensive knowledge of types of vaccines, their immunological mechanisms,		
current recommendations, and administration schedules.		
Log future vaccine recommendations.		
93. Recognize adverse vaccine reactions and demonstrate proper response and interventions.		
94. Demonstrate proper handling, preparation, and administration of chemotherapeutics with appropriate safety protocols. Log specific administration protocols and PPE.		
Behavior		
95. Demonstrate knowledge of canine and feline behavior including head and body language. **		
96. Demonstrate knowledge of behavioral learning concepts (i.e. punishment, positive		
reinforcement, rewards, operant conditioning) detailing problems and recommendations.		
97. Recognize appropriate and inappropriate behaviors in canines and felines and		
provide client counseling regarding current scientifically based techniques of training,		
management, and behavior modification. Log observations and recommendations.		
98. Demonstrate familiarity with a variety of training tools (clickers, collars/halters, etc.)		
and their uses.		
99. Recognize stress when handling canine and feline patients and implement low-stress		
protocols. This may include necessary and appropriate sedation/chemical restraint.		
Log protocols and any administered medications including dose and calculation.		
100.Train practice staff in recognizing and managing aggressive behavior in the practice		
setting (i.e. use of appropriate restraint techniques).		
Practice Management		
101.Participate in the development and/or maintenance of all appropriate facility records and		
logs in compliance with regulatory guidelines (e.g., x-ray, surgery, anesthesia, laboratory,		
controlled substance).		
102.Instruct and supervise staff in the accurate recording of medical information.		
103.Participate in the development and/or maintenance of appropriate sanitation and hospital-		
acquired infection protocols for a veterinary facility, including patient and laboratory areas.		
104.Participate in the development and/or maintenance of infectious disease protocols and		
staff education including the recognition of potentially infectious cases and the proper		
handling and housing of those patients.		
105.Demonstrate proficiency at developing and providing client education in a clear and		
accurate manner at a level the client understands (i.e., oral and written, including educational handouts).		
Euthanasia		
106.Demonstrate skilled application of crisis intervention/grief management skills with clients.		
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107.Assist with and document euthanasia protocol including sedatives, catheter placement, administration, and euthanasia solution used. Include doses and calculations of all sedatives and euthanasia solution. Document client counseling for euthanasia, method of body disposal, and any referral for grief counseling.	
Document proper/respectful care and handling of deceased patient. **	

## The AVTCP reserves the right to verify any information that the candidate provides in the application packet

The AVTCP requires that a licensed veterinarian or a Veterinary Technician Specialist who has mastered the skill, attest to your ability to perform the task. Mastery is defined as being able to perform the task safely, with a high degree of success, and without being coached or prompted no less than four (4) times. Mastery requires having performed the task in a wide variety of patients and situations. The applicant must have mastered a minimum of 80% of the skills listed. The skills mastered must be demonstrated in the case logs and reports.

Name	//	Degree
Printed Name	Signature	-
Name	//	Degree
Printed Name	Signature	
Name		Degree
Printed Name	Signature	
Name		Degree
Printed Name	Signature	
Name	/	Degree
Printed Name	Signature	
Please provide th	ne names and credentials of all persons	who have signed this form
•	ng to your mastery of advanced skills in o	•

*I, the undersigned, declare that I have read the entire AVTCP application packet. I further attest that the above-named applicant has achieved the AVTCP definition of mastery for the above skills that are marked with my signature.*