The Academy of Veterinary Technicians in Clinical Practice

Canine/Feline Application Packet
2021 Case Year

SUBMISSION GUIDELINES

The application year begins January 1, 2021 and ends at 11:59pm December 31, 2021. All skills, logs, reports, reference, and signatures must be obtained during the application year.

Part 1 of the application process must be submitted no later than 11:59pm PST, Wednesday, March 31st, 2021. All of Part 1 is to be completed on the "Application Information" page our website via the links provided.

Once Part 1 has been accepted, applicants will receive an invitation to place their Part 2 documents in the secure AVTCP DropBox. Case logs must be submitted sequentially in 1 MS Word document. Reports must be submitted sequentially as 1 MS Word document. PDF scans of logs and reports will not be accepted. Other documents may be submitted as PDFs or MS Word documents.

Part 2 submissions, including all applicable documents, attachments, and letters of recommendation, will be accepted up to 11:59pm PST, Friday, December 31, 2021. No Part 2 applications will be accepted beyond the due date and time.

The application fee of $50 is required upon submission of Part 1 of the application using the Paypal link provided. Please allow enough time to set up your Paypal account in order for AVTCP to receive payment by the due date and time.

International applicants must ensure their fee is paid in US dollars.

APPLICATION PART 1

Due March 31

Please go to the AVTCP Website's "Application Information" page to access all of the elements required of Part 1 of the application. The elements include:

- Waiver, Release, and Indemnity Agreement
- Professional History
- Veterinary Technician Employment History
- Continuing Education Log
- Knowledge List
- Proposed Recommendation Letter Writers
- Payment of $50

APPLICATION PART 2

Due December 31

Part 2 elements include:

- Exam Questions
- Case Logs
- Case Reports

Instructions for writing exam questions

Stem - introductory statement (information required) and the question itself that elicits the correct answer.

DO THIS

1) Develop patient based questions but don't present a real case. Present a scenario.
2) Stems should be complete and as succinct as possible. Avoid adding unnecessary or misleading information.
3) The stem should be clear enough to provide the examinee with sufficient information to anticipate the type of answer before looking at the responses.
4) Items should be written to assess knowledge of meaningful facts and concepts, not trivial information. Avoid tricks.
5) Include in the stem all words that would otherwise have to be repeated in each of the responses.

DON'T DO THIS

6) Don't test more than one point
7) Avoid using "What would you do?" or "What do you believe?" as these statements cannot be tested
8) Avoid the use of gender pronouns
9) Avoid ambiguous terms such as rarely, commonly, frequently, generally, sometimes and usually. Avoid jargon
10) Never use flawed question formats – negative question, true/false, least likely, none of the above, all of the above

Responses or Options – 1 correct "answer" plus 3 incorrect "distractors".

a) Always list the correct answer first.
b) Always start with a capitol letter unless part of a sentence.
c) The correct answer must be absolutely correct. Pitfall: Lack of one clearly best answer
d) Incorrect answers should be realistic and plausible. No nonsense distractors
e) Make sure you aren't including unintentional clues to the correct answer
f) Distractors should represent unsafe practices or commonly held misconceptions and should be plausible.
g) All responses should be grammatically consistent with the item stem, and all responses should be parallel.
h) Do not make the correct answer substantially longer or more detailed than the distractors
i) Do not use non-homogenous options, don't make the candidate choose between apples and oranges

Rationale – Brief statement explaining the testing point, be sure to describe

(1) the testing point
(2) why you picked the different options
(3) why the indicated answer is best.

References – Author, Title, Publisher, year, page

References should be current, ideally less than 10 years and on the reading list of the specialty.

Avoid proceedings or journal articles as not every candidate will have access to these documents.

References must agree. For example, normal heart rate of a dog differs slightly depending on the text. There is no one answer.

AVTCP EXAM QUESTION FORM

- Please submit 5 exam questions specific to your practice category for committee review for possible use on future AVTCP examinations.
- These questions must be advanced in nature and follow the AVTCP format using the instruction provided.
- Questions must be submitted in a WORD document only.

Question # _____

Question: (Stem)

Responses: (Please list the correct response **first**, capitalize first letter of each response)

A.
B.
C.
D.

Reference: (Source you would quote to prove the correct answer is in fact correct)
Author:
Title:
Publisher:
Year:
Page(s):

Rationale: (A short statement explaining the testing point)

Name:
Contact information:

E-mail address:

Practice Category

☐ Canine/Feline ☐ Feline ☐ Exotic Companion Animal ☐ Production Medicine

Domain

☐ Anesthesia and Analgesia
☐ Diagnostic & Laboratory
☐ Pharmacology
☐ Surgical Nursing
☐ Behavior
☐ Body Mechanics & Systems
☐ Diseases
☐ Animal Care & Treatment
☐ Dentistry
☐ Practice Management

AVTCP CASE LOGS – Instructions/Guidelines

- A *minimum* of 50 cases (maximum of 75) reflecting the mastery of advanced clinical practice knowledge and skills are required. Applicants are encouraged to submit > 50 cases as cases may be rejected.
- Logs must be submitted in 1 complete WORD document, not multiple separately saved documents or as PDFs.
- Acceptable case logs in clinical practice must be taken from experience obtained while practicing with companion animals or production animals relevant to your specialty category. Case logs taken from zoo medicine, laboratory medicine, shelter medicine, or wildlife medicine will not be accepted.
- Case logs will not be accepted from patients belonging to the applicant.
- Cases submitted must take place between January 1st to December 31st of the application year, and should be listed in sequential order from oldest to newest.
- A *minimum* of 80% of the skills list must be cross-referenced in the case logs. Please indicate the skill number in parentheses after citation. You are encouraged to select cases that demonstrate more than one advanced skill. Submission of multiple similar/repetitive cases is discouraged.
- Skills list items should be referenced by skill number and description of skill performed.
- Please be sure to specify details, such as sites/locations for skills list items such as IV catheter placement, venipuncture, drug administration sites, etc.
- The AVTCP case log outline should be utilized. Each case log should be numbered individually and no case log should be longer than one page in length.
- Each case log should only include details for a single patient visit. Multiple visits by the same patient count as only one case unless presented for an entirely new problem. Multiple patient visits can be utilized to demonstrate advanced nursing skills but they will not count towards your total case count after the initial entry.
- 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.
- Abbreviations should be expanded on first mention if not on AVTCP's acceptable abbreviation list.
- Logs should be written in 3rd person with perfect spelling and grammar.
- Logs should be written in Times New Roman 10pt with 1" margins.
- Medications should be referred to by drug name, not brand or trade name.
- Drug dosages must be expressed in metric units with specific dosage, time intervals, and route of administration.
    - *Correct – enrofloxacin (10mg/kg) 200 mg IV q12h ; Incorrect – Baytril ® 8.8 mL bid.*
- ***Please see any additional case log requirements in your specific practice category application.***

AVTCP CASE LOG - Format

Applicant's name:_____

Case log #_____Date_____Patient ID_____

Species/Breed_____Age____Sex____Wt___(kg) BCS_____Pain Score____

Diagnosis_____

_____

Treatment Plan_____

_____

Advanced skills & procedures performed_____

_____

_____

Outcome_____

AVTCP CASE REPORTS – Instructions/Guidelines

- Four (4) complete case reports are required.
- Only cases that take place after the applicant reaches the employment history requirements will be accepted.
- Acceptable case reports in clinical practice must be taken from experience obtained while practicing with companion animals or production animals relevant to your specialty category. Case reports taken from zoo medicine, laboratory medicine, shelter medicine, or wildlife medicine will not be accepted.
- Case reports will not be accepted from patients belonging to the applicant.
- Reports must be no more than five(5) pages each, 1" margins, Times New Roman 10pt., and double-spaced. References and any appendices (e.g. laboratory and/or diagnostic imaging reports, etc.) are not included as part of the five-page maximum.
- The case report must be taken from the case logs. The case log # must be included in the case report.
- Abbreviations should be expanded on first mention if not on AVTCP's acceptable abbreviation list.
- Reports must demonstrate expertise in the management and treatment of clinical cases and will be reviewed for overall quality of nursing care, therapy instituted by the technician, goals of care and therapy, and the technician's role in the management as it relates to the case.
- All case reports involving procedures with animals that are heavily sedated or anesthetized must include an anesthetic monitoring log. This report is not included as part of the 5-page maximum.
- Case reports will be scored on writing (style, grammar, syntax, ability to communicate clearly, concisely yet thoroughly), disease/condition (demonstrating a clear understanding of the disease/condition and explaining the relevant anatomy, pathology and pathophysiology), diagnostics (explanation of diagnostics including reason for test, role in performing test, both normal & abnormal results and nursing response to test), and nursing care and therapy (explanation of goals of nursing care and therapy and role in care).
- Appendices may be included if necessary/desired (ECG tracings, chemotherapy protocols, radiology reports, etc.).
- 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.
- Reports should be written in 3rd person with perfect spelling and grammar.
- The use of references is encouraged. Plagiarism will not be tolerated.
- Medications should be referred to by drug name, not brand or trade name.
- Drug dosages must be expressed in metric units with specific dosage, time intervals, and route of administration.
    - *Correct – enrofloxacin (10mg/kg) 200 mg IV q12h ; Incorrect – Baytril ® 8.8 mL bid.*
- Any attached laboratory reports should be reported in Conventional Units. The following internet conversion page is acceptable to use: AMA Manual of Style Conversion Calculator
- ***Please see any additional case report requirements in your specific practice category application.***

AVTCP CASE REPORTS - Format

AVTCP Case Report #
Case Log#
Title
Author

Signalment
Age, weight, species, breed, gender, BCS, pain score

Presenting Complaint

History

Physical Exam Findings/Observations (admit/first contact)

Problem List/Differential Diagnosis

Diagnostic Approach
State whether lab work was performed in-house or at an outside laboratory.

Treatment Plan

Final Diagnosis

Outcome
Necropsy and postmortem testing is included here if appropriate.

Conclusion/Case Summary
Include information on the disease/condition, the typical history and presentation, the diagnostic approach, treatment and management options, expected outcome and prognosis, and any other pertinent information. Information should be current and high quality; standard textbooks and peer-reviewed journal articles are preferred. All researched information is to be cited.

Discussion
The Discussion section is used to evaluate and critique the case. Unlike the actual Case Report, which is an objective recording of the facts of the case, the Discussion is a subjective analysis of the case management. Explain any deficiencies or potential errors in the case, and justify any steps taken or choices made that differ from case management.

AVTCP ACCEPTABLE ABBREVIATIONS

These abbreviations may be used without expansion in AVTCP applications:

Ab	antibody
ACT	activated clotting time
aPTT	activated partial thromboplastin time
ASA	American Society of Anesthesiologists
AS	left ear
AD	right ear
AU	both ears
BAR	bright, alert, and responsive
BMBT	buccal mucosal bleeding time
BP	blood pressure
bpm	beats per minute
BUN	blood urea nitrogen
°C	degree Celsius
Ca	Calcium
C1, C2…	cervical vertebrae
C/M	castrated male
CBC	complete blood count
cc	cubic centimeter
cm	centimeter
CNS	central nervous system
CO_2	carbon dioxide
CPK	creatinine phosphokinase
CPR	cardiopulmonary resuscitation
CRI	constant rate infusion
CRT	capillary refill time
CSF	cerebrospinal fluid
CT	computed tomography
d	day
dl	deciliter
DNA	deoxyribonucleic acid
ECG/EKG	electrocardiogram or electrocardiograph
EDTA	ethylenediaminetetraacetic acid
ELISA	enzyme-linked immunosorbent assay
ET	endotracheal
$ETCO_2$	end-tidal carbon dioxide
EO	Ethelene Oxide
°F	degree Fahrenheit
F/S	female/spayed
FeLV	feline leukemia virus
FIP	feline infectious peritonitis
FIV	feline immunodeficiency virus
g	gram(s)
g	gauge
gr	grain(s)
h/hr	hour(s)
Hct	hematocrit
Hgb	hemoglobin
hpf	high power field
HR	heart rate
IFA	indirect fluorescent antibody
IT	intratracheal
IM	intramuscular
IN	intranasal
IO	intraosseous
IP	intraperitoneal
ICe	intracoelomic
IV	intravenous
kg	kilogram
kVp	peak kilovoltage
L1, L2…	lumbar vertebrae
L	liter
lpf	low power field
m	meter
mAs	milliampere per second
MM	mucus membranes
M/N	male/neutered
MCH	mean corpuscular hemoglobin
MCHC	mean corpuscular hemoglobin concentration
MCV	mean corpuscular volume
min	minute
mg	milligrams
mL	milliliter
MMOL/L	millimole per liter
MRI	magnetic resonance imaging
NPO	nothing by mouth (nil per os)
NIBP	non-invasive blood pressure
NSAID	non-steroidal anti-inflammatory drug
NSF	no significant findings

O_2	oxygen
OD	right eye (oculus dexter)
OS	left eye (oculus sinister)
OU	both eyes
PCV	packed cell volume
PE	physical exam
pH	measure of the acidity of a solution
PO	per os
POTZ	preferred optimal temperature zone
PT	prothrombin time
Q	every
QAR	quiet, alert, and responsive
QD	once daily
Q72H	every 72 hours
Q48H	every 48 hours
Q24H	every 24 hours
Q12H	every 12 hours
Q8H	every 8 hours
Q4H	every 4 hours
RBC	red blood cell
rDVM	referring doctor of veterinary medicine
RER	resting energy requirement
RNA	ribonucleic acid
RR	respiration rate
Rx	take, receive – used to indicate a prescription or treatment
SC	subcutaneous
sec	second
SpO2	peripheral capillary oxygen saturation
T1, T2…	thoracic vertebrae
T_4	thyroxine
T_3	triiodothyronine
TP	total proteins
TS	total solids
TSH	thyroid stimulating hormone
UA	urine analysis
WBC	white blood cell
wk	week
WNL	within normal limits
wt	weight
yr	year

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.*

- Mastery is defined as being able to perform the task safely, with a high degree of success, and without being coached or prompted. Mastery requires having performed the task in a wide variety of patients and situations.
- The use of cadavers, clinic animals, or personal pets is **unacceptable.**

Skill	***Case Log Number(s)***	***Signature of Veterinarian or VTS***
General Nursing		
1. 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. **		
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.		
4. In association with other medical team members, administer CPR, evaluate effectiveness, and institute therapy. *Adherence to current evidence-based RECOVER CPR guidelines is strongly encouraged.*		
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. **		
7. Demonstrate thorough knowledge of metric conversions using both kg and m^2. Calculations must be included in log.		
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.		
16. Administer crystalloids and/or colloids, monitor administration, and adjust administration in response to therapy and patient status.		
17. Administer blood or blood products, monitor administration and adjust administration as required. Log component used, monitoring, and any intervention required.		
18. 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.).		
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.		
27. Accurately and efficiently perform ocular diagnostic tests (including tonometry, fluorescein staining and/or Schirmer tear test). Log at least TWO tests.		
28. Determine nutritional requirements for different life stages, life styles, and disease processes in the canine and feline. Log calculations.		
29. Calculate and administer nutritional support through a variety of techniques (assisted feeding, feeding tubes, parenteral nutrition, etc.). Log calculations.		
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.		
35. Demonstrate proper nursing care of neonates in the hospital setting. Log all nutritional interventions and techniques.		
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_2 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).		
73. Properly collect and/or handle, store, and submit samples for bacterial and/or fungal cultures. Log source and culture medium.		
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. **		
78. Demonstrate accurate and consistent evaluation and modification of radiographic technique or positioning. Log results of evaluation and modification.		
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 abnormalities.		
80. Demonstrate the ability to set up, maintain equipment, and assist with or perform ultrasonography.		
81. Demonstrate the ability to set up, maintain equipment, and assist with or perform advanced imaging techniques such as CT or MRI.		
Radioactive Iodine		
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. **		
85. Efficiently perform a comprehensive oral exam demonstrated in proper dental charting and notes.		

86. Readily identify oral pathology and anatomic abnormalities.		
87. Demonstrate proper use and care of dental hand instruments (including sharpening and instrument processing protocols) and power instruments.		
88. Perform thorough and efficient dental prophylaxis.		
89. Efficiently and consistently produce dental radiographs of diagnostic quality demonstrating bisecting angle and parallel techniques.		
90. Set up, maintain and troubleshoot all dental equipment.		
Pharmacology		
91. Demonstrate extensive knowledge of groups of drugs, biologics, and supplements, 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.		
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.

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.

All skills **must** be demonstrated in the case logs and reports. Use of cadavers, clinic animals, or personal pets is **unacceptable.**

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.

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 the names and credentials of all persons who have signed this form attesting to your mastery of advanced skills in clinical practice.

KNOWLEDGE LIST

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

1. **Urinary**
    a. Normal anatomical and physiological 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
    l. Prostate disease
    m. Ectopic ureters
    n. Protein losing nephropathy

2. **Hepatobiliary**
    a. Normal anatomical and physiological 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
    l. Toxic hepatopathy

3. **Gastrointestinal**
    a. Normal anatomical and physiological 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
    l. 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 anatomical and physiological 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
l. Diabetes insipidus
m. Growth hormone disorder
n. Hypoparathyroidism
o. Hyperparathyroidism

5. Reproductive

a. Normal anatomical and physiological 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 anatomical and physiological 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 anatomical and physiological 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
l. Pulmonary edema
m. Diaphragmatic hernia
n. Feline respiratory disease complex
o. Canine respiratory disease complex
p. Neoplasia

8. Cardiovascular

a. Normal anatomical and physiological 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
l. PDA, AS, VSD
m. Cardiac tamponade

9. Neurogenic

a. Normal anatomical and physiological 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
l. Degenerative myelopathy
m. Myasthenia gravis
n. Masticatory muscle myositis
o. Wobblers

p. GME
q. Trauma
r. Congenital

10. Hematologic

a. Normal anatomical and physiological 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 anatomical and physiological 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)
l. Perianal fistulas
m. Anal sac disease
n. Mange (sarcoptes, demodex)
o. Cheyletiella
p. Lick granulomas

12. Ophthalmology

a. Normal anatomical and physiological 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
l. Keratoconjunctivitis sicca (KCS)/dry eye

13. **Musculoskeletal**

a. Normal anatomical and physiological 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
l. 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 anatomical and physiological 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
l. 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. 9th ed. Joanna M. Bassert. Saunders. 2018. ISBN: 9780323394611

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

Mosby's Comprehensive Review for Veterinary Technicians. 5th ed. Monica M. Tighe and Marg Brown. Elsevier.2019. ISBN: 9780323596152

Saunders Comprehensive Veterinary Dictionary. 5th ed. V. P. Studdert, C. C. Gay, D. C. Blood. Elsevier.2020. ISBN: 9780702074639

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

Acid-Base and Electrolyte Handbook for Veterinary Technicians. Angela Randels-Thorp and David Liss. Wiley. 2017. ISBN: 978-1-118-64654-0

Fluid Therapy for Veterinary Nurses and Technicians. Paula Hotston Moore. Butterworth-Heinemann. 2004. 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. 2nd 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 for Veterinary Technicians. 3rd ed. Andrea Battaglia and Andrea Steele. Saunders. 2016. ISBN: 978-0323227742

Veterinary Technician's Manual for Small Animal Emergency and Critical Care. 2nd ed. Christopher Norkus. Wiley-Blackwell. 2019. ISBN: 9781119179092

Anesthesia and Analgesia for Veterinary Technicians. 5th 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

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

Lavin's Radiography for Veterinary Technicians. 6th ed. Marg Brown and Lois Brown. Elsevier. 2018. ISBN: 9780323413671

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, 9th ed. Wiley-Blackwell.2018. ISBN: 978-1-119-34445-2

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