



# PHASE I & II EXAMINATION INFORMATION FOR SMALL ANIMAL CANDIDATES

Reviewed and revised 2/22/22

This version is current for the Phase 1 and Phase 2 2022 Examinations.

**Candidates: The Examination Security Form (EXAM-950) is now a separate file, available from the Preparing for the AVDC Examination link on Resident Resources section of the AVDC web page. The form is to be signed and returned (via mail, fax or email) to the AVDC Executive Secretary by October 31<sup>st</sup>, 2021 for the Phase I examination in January 2022, and by March 1<sup>st</sup>, 2022 for the Phase II examination in June 2022.**

## Table of Contents

<b><u>Equine and Non-Species-Specific Examinations .....</u></b>	<b><u>2</u></b>
<b><u>Disabilities and Other Health Issues .....</u></b>	<b><u>2</u></b>
<b><u>Examination Eligibility and Format, Dates and Location of the Examination...</u></b>	<b><u>3</u></b>
<b><u>Examination Fees.....</u></b>	<b><u>3</u></b>
<b><u>Phase I - Multiple Choice Question Examination .....</u></b>	<b><u>5</u></b>
<b><u>Phase I Examination Content Table .....</u></b>	<b><u>5</u></b>
<b><u>Phase II (Practical Examination).....</u></b>	<b><u>16</u></b>
<b><u>Possible Practical Examination (Phase II) Procedure List .....</u></b>	<b><u>24</u></b>
<b><u>Reasons for Failure of Practical Examination Procedures .....</u></b>	<b><u>25</u></b>
<b><u>Suggested Reading List for Candidates and Trainees .....</u></b>	<b><u>30</u></b>
<b><u>Passing Score, Examination Results, Repeat Examinations .....</u></b>	<b><u>34</u></b>
<b><u>Examination Security and Candidate Misconduct .....</u></b>	<b><u>36</u></b>
<b><u>AVDC POLICY ON APPEAL OF ADVERSE DECISIONS.....</u></b>	<b><u>37</u></b>

## **Equine and Non-Species-Specific Examinations**

This Examination Information document includes details for the Small Animal AVDC examination in 2022. It is expected the Equine Phase I and Phase II examinations will be administered on the same dates as the non-Equine examinations in 2022. Further details of the Equine examination are available in a separate Equine Examination document.

## **Disabilities and Other Health Issues**

Within the constraints of an examination environment requiring maintenance of anonymity of the candidates and use by the candidates of equipment during the practical examination, AVDC will endeavor to accommodate disabilities or other health concerns that are made known to the AVDC prior to the examination. Any health-related information you elect to submit will be held in confidence. A separate Disability Accommodation Request document and form (EXAM-960) is available on the Preparing for the AVDC Examination link on Resident Resources section of the AVDC web page.

## **Examination Eligibility and Format, Dates and Location of the Examination**

Veterinarians become eligible to take the AVDC certification examination as a result of successful completion of an AVDC-approved training program and approval of a credentials application.

The examination consists of two Phases administered separately.

The Phase I multiple-choice exam will be administered remotely using a computer-based testing platform called Examsoft on Thursday, January 13<sup>th</sup> and Friday, January 14<sup>th</sup>, 2022 for all candidates. Two security features of Examsoft, ExamID and ExamMonitor, will be used to verify your identity (ExamID) and record your audio, video and screen during the exam (ExamMonitor).

Phase II is the Practical examination, requiring candidates to perform procedures on cadavers, which is scheduled to be given at the Viticus Center, Las Vegas, NV over the course of the week of June 13-16, 2022.

For veterinarians who became candidates in 2014 or later, entry to Phase II will be limited to candidates who have passed the Phase I examination. Any individual who fails the Phase I examination three times is no longer a candidate for the AVDC examination (except as noted under 'Repeat Examinations' on pages 13 and 14 of this document).

Individuals who became candidates in 2013 or earlier, and who have previously taken and failed one or more parts of the examination and have eligibility for an additional attempt, will be allowed to take any of the part of the examination that they have not yet passed.

### **Tentative dates for future examinations:**

The Phase I second or third Thursday and Friday in January each year.

Tentative future Phase II Practical examination dates are:

- June 10-16, 2023
- June 8-14, 2024
- June 7-13, 2025

## **Examination Fees**

The Examination fee is separate from the Credentials Application Fee.

**Phase I Examination (Multiple choice examination): \$1,500**, whether being taken for

the first or a subsequent time.

The signed Phase I Examination Security Form is to be submitted by and the examination fee paid by new candidates and re-examination candidates by **October 31<sup>st</sup> of the year preceding the examination.**

This form (EXAM-950) is available in the Preparing for the AVDC Examination link on the Resident Resources section of the AVDC web page.

**Phase II Examination (Practical).** Only candidates who have passed the Phase I examination are eligible for entry to the Phase II Practical Examination (with the exception of individuals who became candidates in 2013 or earlier). The anticipated Phase II examination fee for 2022 will be \$3,000.

The signed Phase II Examination Security Form is to be submitted by and the examination fee paid by new candidates and re-examination candidates by **March 1, 2022.** This form (EXAM-950) is available in the Preparing for the AVDC Examination link on the Resident Resources section of the AVDC web page.

**Deferral and Refund:**

Candidates who have paid an examination fee and who subsequently inform AVDC that they are electing to defer taking the examination no less than 30 days prior to the examination date may request a refund of the paid examination fee or leave the funds in place as a credit for a subsequent examination attempt. No refund will be available if the candidate does not inform AVDC 30 or more days prior to the examination, except for documented personal or family emergency reasons.

## **Phase I - Multiple Choice Question Examination**

Phase I of the examination will consist of two sessions; the scores from the two sessions will be combined as a single Phase I score in determining Pass or Fail.

Phase I will be given January 13<sup>th</sup> and 14<sup>th</sup>, 2022, and will be administered remotely via computer at the candidate's home or office location utilizing a virtual proctor software. Eligible candidates will be given information on computer/software requirements and a training session on the software prior to the examination dates.

Each session of the Phase I examination will include approximately 200 four-part multiple-choice questions, which may be accompanied by images (radiographs, clinical photos/specimens, dental instruments and materials etc.) It will be given in 90-minute increments with breaks between segments. The exact schedule will be given to eligible candidates in advance of the examination dates. The Phase I examination is designed to assess knowledge of the scientific literature in topics relevant to veterinary dentistry, including oral diagnosis and treatment planning, familiarity with anatomy, materials, supplies and equipment, as well as therapeutic judgment in topics relevant to veterinary dentistry, as described in the Examination Content Table below. Large animal and exotic animal questions in the Phase I exam will not exceed 10%.

### **Phase I Examination Content Table**

#### Summary of Proportion of Content:

Periodontology	19%
Endodontics	16%
Oral Surgery	16%
Operative Dentistry	9%
Orthodontics	5%
Oral Medicine	10%
Anesthesia & Analgesia	13%
Diagnostic Imaging	13%

**PERIODONTOLOGY**

**Understand anatomy, physiology, pathophysiology, and pathology as it relates to periodontology**

- 1. Healing of periodontal tissues
- 1. Periodontal anatomy
- 1. Physiology and pathophysiology of periodontal disease
- 1. Principles of implantology and osseointegration

**Assess periodontal health or disease and develop a comprehensive treatment plan**

- 1. Classification systems for dental record keeping (e.g., furcation exposure, gingivitis)
- 1. Instrumentation for periodontal evaluation
- 1. Clinical signs and manifestations of periodontal disease
- 1. Indications, contraindications, materials and techniques for performing professional dental cleanings and periodontal treatment
- 1. Indications, contraindications, materials, and techniques for treatment of combined periodontic/endodontic lesions
- 1. Indications, contraindications, materials, and techniques for periodontal splinting, guided tissue regeneration, bone augmentation, and periodontal membranes
- 1. Techniques, principles and materials to implement home care programs
- 1. Presence of severe cases of periodontal disease requiring staged treatment, including recognition of systemic or immunopathic effects
- 1. Assessment of pretreatment systemic, general and local immunologic health of the animal as it relates to treatment options

**Utilize appropriate periodontal instruments, materials, and techniques and assess outcome/complications for the treatment plan, and develop follow-up plan**

- 1. Materials and techniques to treat periodontal pockets and exposed root surfaces
- 1. Care and use of hand instrumentation including curettes and scalers
- 1. Materials and patterns used to suture a periodontal flap
- 1. Materials and techniques to perform gingivectomy/gingivoplasty

1. Polishing equipment and materials
1. Care, use, and mechanism of action of power equipment
1. Visualization equipment such as light source, magnification, and mirrors
1. Combined periodontic/endodontic monitoring post-treatment
1. Dietary products, treats, and toys that may promote oral health by retarding plaque and calculus
1. Home care products – indications, use, and contraindications
1. Mechanisms of action of home care products
1. Postoperative care, long-term prognosis, and future assessment
1. Strategies for periodontal disease prevention, maintenance and improvement
1. Evaluation of home care product efficacy and safety
<b>ENDODONTICS</b>
<b>Understand anatomy, physiology, pathophysiology, and pathology as it relates to endodontics</b>
1. Gross and microscopic endodontic and periapical anatomy
1. Physiology and pathophysiology of the pulp-dentin complex and periapical tissues
<b>Assess endodontic health or disease and develop a comprehensive treatment plan</b>
1. Clinical signs of, and methods to assess, endodontic disease, including tooth fractures, tooth resorption, pulpitis, and developmental defects
1. Tooth-fracture classifications and nomenclature
1. Indications, contraindications, materials, and techniques for vital pulp therapy, plus or minus coronal reduction
1. Indications, contraindications, materials, and techniques for standard (orthograde) endodontic therapy
1. Indications, contraindications, materials, and techniques for surgical (retrograde) endodontic therapy
1. Indications, contraindications, materials, and techniques for hemisection and root resection
1. Indications, contraindications, materials, and techniques of apexification procedures
1. Physical properties of endodontic materials

**Utilize appropriate endodontic instruments, materials, and techniques and assess outcome/complications for the treatment plan, and develop follow-up plan**

1. Appropriate access for standard (orthograde) and surgical (retrograde) endodontic therapy

1. Materials, equipment and methods for root canal debridement and irrigation

1. Materials and methods for obturation

1. Materials and methods for restoration following endodontic therapy

1. Root canal instrumentation, materials, and methods

1. Causes, prevention and treatment of iatrogenic procedural complications of endodontic therapy

1. Radiographic assessment of treatment outcome

**ORAL SURGERY**

**Understand anatomy, physiology, pathophysiology, and pathology as it relates to oral surgery**

1. Anatomy, physiology, pathophysiology, and pathology of orofacial structures

1. Surgical considerations of effects of radiation therapy, chemotherapy, and immunosuppressive medications on the surgical site

1. Maxillofacial fracture types and biomechanical effects of oral structures

1. Incidence, prevalence, and biological behavior of oral tumors and non-neoplastic diseases that can mimic neoplasia

1. Pathophysiology and pathology of acquired and congenital hard and soft palate defects

1. Physiology of hard and soft tissue healing

**Assess health or disease as it relates to oral surgery and develop a comprehensive treatment plan**

1. Assessment of hard and soft palate defects (including oronasal and oroantral communications)

1. Assessment of head trauma patient prior to surgery

1. Indications, contraindications, and techniques for exodontia of teeth and root remnants

1. Indications and contraindications of incisional vs. excisional biopsy techniques

1. Indications, contraindications, and techniques for partial/total mandibulectomy and maxillectomy



1. Indications, contraindications, and techniques for repair of acquired and congenital hard and soft palate defects
1. Indications, contraindications, and techniques for maxillofacial fracture repair
1. Techniques, materials, indications and contraindications for repair of traumatic injuries
1. Indications, contraindications, and techniques for salivary gland and lymph node surgery
<b>Utilize appropriate oral surgical instruments, materials, and techniques and assess outcome/complications for the treatment plan, and develop follow-up plan</b>
1. Closed and open extraction techniques
1. Extraction site management (e.g., protect soft tissue, flap and suture techniques, implant materials)
1. Instrumentation for exodontia
1. Management of teeth in fracture lines
1. Management of temporomandibular joint disease and associated conditions
1. Management of tooth displacement injuries
1. Materials, instrumentation, and techniques for oral and maxillofacial surgery
1. Noninvasive and invasive techniques for treatment of maxillofacial trauma
1. Nonsurgical and surgical methods for treatment of hard and soft palate defects
1. Nonsurgical and surgical treatment of osteomyelitis
1. Nutritional management of the oral surgery patient
1. Complications of extraction procedures and their management
1. Complications of hard and soft palate repair procedures and their management
1. Complications of maxillofacial trauma repair and their management
1. Complications of oral biopsies and their management
1. Complications of partial/total mandibulectomy and maxillectomy and their management
1. Postoperative and follow-up management of the oral surgery patient
<b>OPERATIVE DENTISTRY</b>
<b>Understand anatomy, physiology, pathophysiology, and pathology of tooth structure</b>

1. Normal anatomy and histology of tooth structure, including occlusal contacts
1. Tooth structure, pathophysiology, and pathology and classification of defects
<b>Assess structural integrity of teeth and develop a comprehensive treatment plan</b>
1. Presence of direct or indirect pulp exposure
1. Effects of alteration of normal anatomy or structural integrity
1. Periodontal considerations for restorations
1. Indications and contraindications for placement of dental prostheses
1. Indications, contraindications, types, uses, and wear characteristics for restorative and prosthodontic materials
1. Periodontal considerations for restorations
1. Physical properties of restorative materials
1. Principles of micro- and macro-mechanical retention of dental restorative materials
<b>Utilize appropriate operative dentistry instruments, materials, and techniques and assess outcome/complications for the treatment plan, and develop follow-up plan</b>
1. Cavity preparation
1. Instrumentation for operative dentistry
1. Materials and techniques for crown buildup procedures
1. Placement and finish of restoration material
1. Techniques and materials for obtaining impressions and model fabrication
1. Techniques for appropriate crown reduction methods
1. Techniques, materials, indications, and contraindications for marginal finish and prosthesis cementation
1. Complications of operative dentistry and their management
1. Postoperative and follow-up management of restorative dentistry patient
<b>ORTHODONTICS</b>
<b>Understand anatomy, physiology, pathophysiology, and pathology of occlusal patterns</b>

1. Occlusal characteristics and skull types
1. Developmental anatomy and embryology
1. Genetic basis for orthodontic problems
1. Normal and abnormal adult anatomy, occlusion, and function
<b>Assess occlusion pattern and develop a comprehensive treatment plan</b>
1. Current nomenclature and classification to accurately describe occlusion/malocclusion
1. Consequences of malocclusion
1. Appearance of secondary trauma associated with malocclusion
1. Age of animal relative to performance of procedure and effects of subsequent growth
1. Effects of orthodontic appliance on development of occlusion
1. Legal and ethical considerations for orthodontic treatment and genetic counseling
1. Probability of short- and long-term success of the orthodontic treatment
1. Techniques for orthodontic movement of various malocclusions
1. Indications and principles of interceptive orthodontics
1. Physical properties of orthodontic materials
1. Time required to complete orthodontic treatment
1. Animal behavior and treatment compliance
1. Indications and contraindications for appliance use
<b>Utilize appropriate orthodontic instruments, materials, and techniques and assess outcome/complications for the treatment plan, and develop follow-up plan</b>
1. Appliance design, installation, maintenance and removal
1. Equipment and materials for orthodontic treatment
1. Retention devices
1. Indications, contraindications, advantages, and disadvantages of direct and indirect appliance fabrication
1. Complications of orthodontic treatment

**ORAL MEDICINE**

**Understand anatomy, physiology, pathophysiology, and pathology of diseases of the craniofacial region and oral cavity**

- 1. Normal anatomy and physiology of the craniofacial region and oral cavity
- 1. Species and breed differences with respect to the incidence and prevalence of diseases of the oral cavity
- 1. Prevalence and biological behavior of local and systemic diseases affecting the oral cavity and craniofacial region including developmental, degenerative, allergic, metabolic, inflammatory, infectious, immune mediated, nutritional, traumatic, toxic, and neoplastic, both benign and malignant
- 1. Systemic impact of oral disease
- 1. Regional impact of oral disease (e.g., sinusitis, fistula formation)
- 1. Radiation therapy, chemotherapy, and immunosuppressive medication effects

**Assess craniofacial region and oral cavity health or disease and develop a comprehensive treatment plan**

- 1. Clinical presentations of primary (e.g., stomatitis, masticatory myositis) and secondary diseases (e.g., hyperparathyroidism, petechia)
- 1. Limitations of diagnostic tests
- 1. Prioritization of pathology and treatment in context of overall patient health and well-being
- 1. Adjunctive therapy for specific tumor types
- 1. Indications and contraindications for medical and surgical therapies
- 1. Treatment options for client education
- 1. Appropriate diagnostic modalities for primary disease, secondary diseases, and staging of neoplasia
- 1. Therapeutic effects and side effects of medical and surgical therapies
- 1. Indications for antimicrobial drug use
- 1. Nutritional requirements

**Utilize appropriate oral medicine instruments, materials, and techniques and assess outcome/complications for the treatment plan, and develop follow-up plan**

1. Diagnostic equipment and techniques for tissue sampling (e.g., cytology, biopsy, culture)
1. Treatment modalities (e.g., pharmaceuticals, immunological agents, chemotherapeutic agents, radiation, laser therapy, physical therapy)
1. Treatment options of systemic disease
1. Nutritional management and feeding techniques
1. Cytological preparations, special stains, and microscopic evaluation
1. Follow-up for medical and surgical therapies for primary and secondary disease
1. Management of complications and side effects of medical and surgical therapies
1. Appropriate modification of long-term medical therapies, based on patient response and potential for adverse patient reactions to the selected medical therapies
1. Prognosis and response to treatment
<b>ANESTHESIA AND ANALGESIA</b>
<b>Understand anatomy, physiology, and pharmacology of anesthesia and analgesia</b>
1. Species and breed differences (e.g., brachycephalic, sighthound, lagomorph) for delivery of anesthesia, sedation, and regional analgesia
1. Injectable, inhalant, multimodal anesthetics, anesthesia, analgesia, sedation, constant rate infusions and their related metabolism
1. Systemic physiology related to anesthesia with particular emphasis on cardiopulmonary, renal, and hepatic physiology
1. Regional anatomy (e.g., maxillofacial innervation, vascularization, and important structures) for regional analgesia
1. Pharmacology of local/regional anesthetics, analgesia, and related metabolism
1. Anesthetic drug interactions with concurrent medications (e.g., seizure, behavioral, homeopathic, cardiovascular, renal)
1. Contraindications of medications used for medical problems and anesthesia/analgesia
1. Anesthetic considerations for pediatric and geriatric patients
<b>Assess health and disease for appropriate pre-anesthetic evaluation of the dentistry and oral surgery patient and develop a comprehensive anesthesia and analgesia treatment plan</b>

1. Patient history, signalment, and physical examination
1. Assessment of preoperative laboratory testing (e.g., CBC, chemistry panel, urinalysis, endocrine testing, radiography, ancillary imaging)
1. Animal demeanor in relation to anesthetic protocol
1. American Society of Anesthesiologists (ASA) physical status classification
1. Concomitant disease (e.g., cardiac, renal, endocrine, trauma) conditions that can impact the safety of anesthesia delivery, protocol design/drug selection, and anesthesia monitoring
1. General anesthesia and analgesia protocols, indications, and contraindications
1. Individual anesthetic and analgesic plans for patients with concomitant disease (e.g., cardiac, renal, endocrine, trauma)
1. Regional/local analgesia techniques, indications, and contraindications
1. Multimodal pain control, acute pain, chronic pain, and cancer pain
1. Indications for extraoral endotracheal tube placement, example: pharyngotomy
1. Maintaining homeostasis (e.g., thermoregulation, hemodynamics)
<b>Utilize appropriate anesthesia and analgesia instruments, materials, and techniques and assess outcome/complications for the treatment plan, and develop follow-up plan</b>
1. Anesthesia machines and circuit types
1. Anesthesia physiological monitoring equipment (e.g., capnography, pulse oximetry, electrocardiogram, blood pressure, temperature) and data interpretation
1. Anesthesia thermoregulation devices (e.g., circulating water blankets, force air convection warming devices, carbon fiber blankets, IV fluid warmers)
1. Regional and local anesthetic administration
1. Anesthesia delivery mechanisms (e.g., intravenous, inhalant, CRI)
1. Pharyngostomy and tracheostomy tube placement
1. Anesthetic reversal agents (e.g., atipamezole, flumazenil, naloxone)
1. Re-warming devices
1. Emergency procedures (e.g., tracheostomy, CPR) and equipment
1. Crystalloid, colloid, and blood product support
1. Emergency drug indications and routes of delivery
1. Recognition and management of common arrhythmias

1. Management of hypotensive crises
<b>DIAGNOSTIC IMAGING</b>
<b>Understand anatomy, physiology, pathophysiology, and pathology as related to diagnostic imaging</b>
1. Anatomy and physiology of the dental and periodontal tissues
1. Anatomy and physiology of the skull and soft tissues of the head and neck
1. Normal radiographic development of the teeth and the jaws
1. Developmental and acquired abnormalities of the teeth, jaws, and soft tissues of the head
1. Fundamentals of diagnostic imaging (e.g., radiographs, CT, MRI, ultrasound)
<b>Assess patient health or disease utilizing diagnostic imaging and develop a comprehensive plan to obtain diagnostic images</b>
1. Radiographic interpretation of endodontic and periodontal anatomy and pathology
1. Extraoral imaging (e.g., radiographs, CT, MRI) interpretation of maxillofacial health and disease
1. Radiographic interpretation of anatomical/developmental normal structures and anomalies
1. Radiographic diagnosis of bone lesions
1. Radiographic/imaging signs of benign and malignant lesions, including determination of radiographic margins of neoplastic disease
1. Radiographic interpretation of dental and oral/maxillofacial trauma
1. Radiographic pathology of developmental or congenital anomalies
1. Indications and contraindications of various diagnostic imaging modalities
1. Patient and operator protection and radiation safety guidelines
1. Patient immobilization for obtaining diagnostic images
<b>Utilize appropriate diagnostic imaging instruments, materials, and techniques to obtain and interpret diagnostic images, assess outcome/complications, and develop follow-up plan based on diagnostic images obtained</b>
1. Operation of X-ray generators and advanced imaging modalities
1. Patient preparation and positioning

1. Radiographic imaging including conventional film and digital radiography
1. Parallel, bisecting angle, and occlusal techniques
1. Developing, processing, and positioning
1. Imaging artifacts
1. Labial and lingual mounting techniques
1. Identification and archival storage of images
1. Interpretation of intraoral and extraoral radiographs
1. Interpretation of magnetic resonance imaging studies
1. Interpretation of computed tomography studies
1. Radiographic procedures to determine presence and location of retained roots
1. Radiographic/imaging interpretation of previous treatments

## Phase II (Practical Examination)

The Phase II Practical Exam will be administered over the week of June 13th-16th, 2022 at the Viticus Center in Las Vegas, NV. There will be a mandatory orientation session the evening prior to the first day of the examination. This examination is designed to assess the clinical technical skills of the candidate and will be given in four core sessions. The candidates will perform two procedures within each of the four core disciplines: periodontics, endodontics, oral surgery, and restorative dentistry/prosthodontics/orthodontics. The core schedule and time limit for each session is listed below and is for the 2022 cycle only. The format of the examination will be explained further at the exam security meeting and at the beginning of the examination. Plan your work sequence at the start of the session and continue to be aware of the remaining time during the testing session.

### **Tentative 2022 Phase 2 Examination Location and Schedule**

Dates and times are subject to change

#### **Tuesday June 14<sup>th</sup>**

Location: Viticus Center Eastern Campus, 5810 S Eastern Avenue, Las Vegas, NV 89119

5pm - 6pm Candidate Orientation Meeting/Candidate Security Registration\*\*

6pm - 8pm Candidate practical station set-up

\*\* Attendance at this meeting is **mandatory** in order to complete the AVDC security and anonymity procedures.



Access to the laboratory to start set-up for the practical examination will not be permitted until after the orientation and security meetings have finished. Two hours (120 minutes) will be made available for workstation set-up (regardless of when the orientation and security meetings end). All candidates will be allowed into the laboratory at the same time, given the opportunity to find their work station, and then allowed to set up, and to practice using the radiographic equipment; cadaver specimens will be provided.

The tentative schedule for Phase II exam is outlined below:

**Wednesday June 15<sup>th</sup>, 2022**

Location: Viticus Center Eastern Campus, 5810 S Eastern Avenue, Las Vegas, NV 89119

7:30 am:	Candidates may enter the testing room
8:00 am:	<b>Session 1</b> begins
11:00 am:	End of session 1
11:00 am- 12:00 pm:	Break for cleanup of station and setup for next session and short lunch break. It is advised that candidates bring their lunch to eat at Viticus during this break or travel only a short distance to a local restaurant. Session 2 begins promptly at 12:00 pm.
12:00 pm:	<b>Session 2</b> begins
3:00 pm:	End of session 2
3:00-3:30 pm:	Cleanup of station, candidates exit testing room promptly at 3:00 pm

**Thursday June 16<sup>th</sup>, 2022**

Location: Viticus Center Eastern Campus, 5810 S Eastern Avenue, Las Vegas, NV 89119

7:30 am:	Candidates may enter the testing room
8:00 am:	<b>Session 3</b> begins
10:00 am:	End of Session 3
10:00-11:00 am:	Break for cleanup of station and setup for next session, short lunch break. It is advised that candidates bring their lunch to eat at Oquendo during this break or travel only a short distance to a local restaurant. Session 2 begins promptly at 11:00 am.
11:00 am:	<b>Session 4</b> begins
1:00 pm:	End of Session 4

1:00-2:00 pm: Cleanup and breakdown of workstations, all candidates.

**Time allotments per core discipline will be as follows for the 2022 Phase II exam and may be subject to change:**

Endodontics: 3 hours

Oral Surgery: 3 hours

Restorative Dentistry/Prosthodontics/Orthodontics: 2 hours

Periodontics: 2 hours

**\*\*ORDER OF SESSIONS WILL BE CONFIRMED AT THE EXAMINATION SECURITY MEETINGS\*\***

**ALL CANDIDATES MUST BE PRESENT FOR THE EXAMINATION SECURITY MEETING ON JUNE 14<sup>TH</sup> AND NO CANDIDATES WILL BE ALLOWED TO PACK UP THEIR STATIONS UNTIL THE END OF THE LAST SESSION ON JUNE 16<sup>TH</sup>.**

**Candidates will only be permitted in the testing room during their required core sessions and designated set-up/clean-up times.**

**Candidates should not schedule flights home earlier than 6 pm on Thursday June 16<sup>th</sup>, 2022.**

### **Hotel Accommodation**

You are responsible for your own hotel accommodations. The two hotels close to the Viticus Center are:

- Hampton Inn and Suites, McCarran Airport - 6575 S Eastern Ave, Las Vegas, NV 89119; 702-647-8000
- La Quinta by Wyndham Las Vegas Airport South - 6560 Surrey Street, Las Vegas NV 89119; 702-492-8900

It is recommended that you ask for a “quiet” room on the non-airport side since these hotels are on the outskirts of airport property.

Many other hotels, motels, etc. are located in Las Vegas.

### **Other information:**

Restrooms are readily available at the Viticus Center.

There is no cafeteria or food service in the Viticus Center.

You will be permitted to bring food and beverages into the building, but not into the examination rooms. Please plan ahead so that your food and liquid refreshment needs are met. There are small lockers available to store your food and other belongings.

Some snacks, water and other beverages may be provided by the Viticus Center. Food and beverages other than water are not allowed in the examination rooms.

While every effort is made to ensure consistency between specimens to ensure fairness, as in clinical practice not all specimens are exactly the same. Each candidate should work with their specimen(s) to the best of their ability. The candidate should carefully examine their specimen for any additional pathology in the area of the specified procedure and alert the proctor if any are found. All of the cadaver specimens used in the Phase II exam are ethically sourced, and no animals are euthanized for the sole purpose of the exam.

Candidates are to work independently, and no candidate is allowed to receive help on any phase of the practical examination. **Sharing of equipment or materials among candidates during the examination sessions is not permitted**, as this has been found to be disruptive to the examination process. With the exception of minimal conversation with a proctor directed toward the use of AVDC-provided equipment, candidates are not to engage in conversation during the examination. Pets, family members, friends, staff, and personal belongings not related to the examination will not be allowed in the examination area. Electronic music players and earphones are not allowed (see Examination Security and Candidate Misconduct). You may use earplugs if you wish to reduce ambient noise.

**Work Station:**

Each candidate will be assigned a workstation consisting of an 8' table, mobile surgery light and power strip. Surgical loupes with a light source are strongly recommended and are each candidates' personal responsibility if used. Digital clocks are present and visible throughout the room.

Materials at each individual workstation cannot be stacked beyond "counter top height." Any overflow is restricted to within 2 feet to the left and right sides of the workstation and no further behind the workstation than 4 feet. Additional necessary space will be allotted as a first come, first serve basis around the periphery of the practical examination room.

**Dental high-speed units and hand-pieces:**

Candidates will be allowed to use the scaler hand pieces provided on the unit and a universal scaling tip will be provided. One high-speed hand piece will also be provided. No other hand-pieces or scalers will be provided – **you are required to bring a low-speed handpiece, back up high- and low-speed hand-pieces, couplers, tips and burs you wish to use in the examination.**

**Candidates will be randomly assigned a dental high speed unit from iM3, MAI or Midmark. These assignments will be made by April 2022.**

### **Midmark Equipment Specifications**

These specifications are subject to change.

The Midmark 1000 has conventional 4-hole and 5-hole (fiberoptic) connections, and a piezo electric scaler hand-piece. **Candidates wishing to use the scaler must provide their own piezo scaling tips.** Piezo tips must be Acteon Satelec brand tips only. Other brands may fit into the hand-piece but may not work normally in the Midmark units. Acteon Satelec tips can be purchased through Midmark representatives, dealers or directly from Midmark at the link below.

Scaler tips can be purchased from your distributor online from the Midmark part store at this link:

[https://www.midmarkserviceparts.com/catalog/search/categories/Animal%20Health%20Dental?utm\\_source=midmark&utm\\_medium=banner&utm\\_campaign=2019-ah-category-banner&utm\\_content=eu-dlr](https://www.midmarkserviceparts.com/catalog/search/categories/Animal%20Health%20Dental?utm_source=midmark&utm_medium=banner&utm_campaign=2019-ah-category-banner&utm_content=eu-dlr)

The following are commonly ordered scaler tip numbers, which can be searched on the Midmark website (above) for purchase:

016-1203-00 Universal, Tip No. 1  
016-1203-03 Voluminous Calculus, Tip No. 2  
016-1203-04 Shallow Pockets, Tip No. 10P  
016-1203-01 Subgingival, Tip No. 10Z  
016-1203-02 Periodontics, Micro Universal Curette, Tip No. H3  
016-1203-13 Universal Scaling, Longer and Thinner, Tip No. 1S

AVDC cannot guarantee that hand-pieces with fiberoptic capability will function properly with all candidate-provided fiberoptic lights at the hand-piece head.

The Midmark 1000 has water bottles that are used to provide water to the built-in hand-piece lines. Distilled water will be provided for use in the bottles of the Midmark dental units and that water is available via the high-speed hand-piece line and the air-water syringe line. Ports on the back of the dental unit can be used for attaching additional equipment, provided the candidate brings an appropriate coupler for the water to flow through from the back of the Midmark 1000 to the additional equipment.

### **MAI Equipment Specifications**

These specifications are subject to change.

The Inovadent unit has conventional 4-hole (low speed) and 5-hole (high speed) connections, and a piezo electric scaler hand-piece. **Candidates wishing to use the scaler must provide their own piezo scaling tips. For the Inovadent units, KLAW tips should be utilized (see below).**

The following are commonly ordered scaler tip numbers, which can be purchased from MAI at the following website: [www.maianimalhealth.com](http://www.maianimalhealth.com) . An account needs to be created to obtain veterinary prices.

ITEM NUMBER	PRODUCT DESCRIPTION	UOM	MIN ORDER QTY	MIN ORDER QTY	Vet/Dealer UOM Price
54833	KLAW™ 4 – Piezo Tip	Each		1	\$95.55
54844	KLAW™ Wrench	Each		1	\$9.19
54158	Spotlight LED Standard Head High Speed Handpiece	Each		1	\$780
54154	Ultima E-Style Low Speed Polisher	Each		1	\$582.75

The Inovadent units use a remote water bottle that services 4 units each. Distilled water will be provided for these units as well. Ports on the back of all dental units can be used for attaching additional equipment, provided the candidate brings an appropriate coupler for the water to flow through from the back of the units to the additional equipment (such as a scaler).

### **iM3 Equipment Specifications**

Specifications are subject to change.

The GS Deluxe LED is equipped with an air-driven, LED light on the high-speed hand-piece. If you provide your own hand-piece that has a fiberoptic light, the light will NOT work on the GS Deluxe LED. **5-hole handpieces will NOT work on iM3 units.**

The iM3 GS Deluxe LED dental unit has a conventional 4-hole connection, LED, 360-degree swivel handpiece, and a P6 piezo electric scaler. **Candidates wishing to use the scaler must provide their own piezo scaling tips.** Piezo tips must be Acteon Satelec brand tips only. Other brands may fit into the hand-piece but may not work normally in the iM3 units. Acteon Satelec tips can be purchased through dealers or directly from iM3.

<http://www.im3vet.com>

The GS Deluxe LED has water bottles that are used to provide water to the built-in hand-piece lines. Distilled water will be provided for use in the bottles in the GS Deluxe LED dental units and that water is available via the high-speed hand-piece line and the

air-water syringe line. Ports on the back of the dental unit can be used for attaching additional equipment, provided the candidate brings an appropriate coupler for the water to flow through from the back of the GS Deluxe LED to the additional equipment.

**Instruments and materials** such as digital radiographic film, hand-pieces, restorative material, curing lights, impression materials etc. are not supplied by the AVDC. The Examination Committee discourages the use of thermoplasticized gutta percha for endodontic procedures due to the temperature of the materials provided. The use of surgical adhesives for closure is not allowed because this prevents evaluation of surgical technique. Due to safety regulations, use of two-part, liquid-powder methyl methacrylate products and chloroform are **not** allowed; candidates must find an alternate material for procedures that might call for the use of such products. Candidates will **not** be required to use amalgam for restorative procedures. Candidates will **not** be required to pour stone models. To summarize, all materials necessary to complete the practical examination sessions, and which were not mentioned in this document as being supplied by the AVDC, are the responsibility of the candidate. No reading materials associated with dental equipment or supplies may be brought into the examination room, except product information sheets that were originally packaged with the equipment or material.

**Set-up:** In addition to the set-up time in the evening prior to the first session, the candidates will be allowed into the examination room 30 minutes prior to the scheduled start time of the first session of each day, to set up their equipment. To avoid disruptions to others, all candidates are required to set-up and breakdown equipment at the same time, regardless of cores they are taking.

### **Radiographs:**

Specifications are subject to change.

A digital radiographic system will be used by all candidates, and there will be 1 dental x-ray machine and CR7 processing station per every 5-6 candidates. Free-standing digital radiography units will be used to create and expose images using the CR7 system, available from IM3. Candidates will be required to purchase their own phosphor plates for the examination.

It is recommended that candidates bring one or two size 4 phosphor plates and two size 2 phosphor plates. Plates can be purchased through IM3 directly (800-664-6348). Size 2 plates (X7120) are \$331.20 for a pack of 4 and size 4 plates (X7140) are \$224.10 each (prices subject to change)- be sure to mention that you are purchasing the plates for the AVDC examination to obtain the discounted rate. This rate should only be used for attendees purchasing plates for the examination.

AVDC will provide barrier sleeves for use with the phosphor plates when radiographing your specimen; therefore, you are not required to purchase barrier sleeves; however, AVDC strongly recommends using a barrier sleeve when you are using phosphor plates in clinical practice or when practicing for the examination, to prevent the plate from becoming scratched or dirty. The sleeves are available from IM3.

USB flash drives will be provided with each specimen for storage of images. The radiographic images will be viewed on Microsoft Surface Pro 3 tablets (or something comparable) provided by AVDC. This is a touch-screen Windows-based device and will allow image files to be accessed from the thumb drive folder in the same manner they would be viewed on a PC. The model being used has the following specifications: Microsoft Surface Pro 3 iCore 3; 4GB RAM; 64GB Solid state drive; 12-inch screen; Windows 10 pro operating system. Candidates should safely “eject” the USB drives to prevent accidental deletion of images.

**Submission of items for grading:**

**Examination materials must be handed in on time.** The final five minutes of the examination will be recorded. The entire examination period may be video recorded. Radiograph generators will be turned off with 5 minutes remaining; unprocessed films placed at the development station immediately following the generator being powered down will be processed; if a processing backlog occurs, any undeveloped films will be processed and considered “turned in” upon the call of time despite not being viewed by the candidate. All specimens and related materials for grading (such as resected specimens, impressions or USB flash drives containing radiographs) must be placed in plastic boxes with the top closed, and the box must be placed on the floor before or at the time that the end of the examination is announced. Time remaining in the session will be announced periodically by the proctor. Candidates will be informed by announced countdown of the last 15 seconds prior to the end of the examination.

If a specimen is not in the plastic box on the floor with the top latched on at the announced end of the examination, proctors will physically collect the specimens and place them in the plastic box. A red tag will be attached to that specimen box (which will be removed before the specimen box is seen by the graders). These red tag specimens will be penalized 35% of the actual scores given by the graders for procedures performed on those specimens. Physical resistance by the candidate to collection of the specimen by the proctor will cause the proctor to back away with the result that the specimen will not be graded at all. Additional materials such as resected tissues, USB flash drives containing radiographs, impressions or extracted teeth not in the

plastic box when collected by the proctor will still be submitted for grading but will receive a 35% penalty for the portion of the grading that the item pertains to.

Any items being submitted for evaluation (such as impression trays) must be completely devoid of any identifying mark other than the specimen numbers that will be assigned at the time of the examination.

Candidates must submit only what is specifically requested on the examination instructions. Any other material submitted will not be evaluated and may compromise the anonymity of the candidate.

**Safety issues:** Taking dangerous chemicals (e.g. chloroform, bleach) on airplanes is illegal. Candidates currently residing outside the USA should be aware that the voltage in the United States is 110v. Given the travel security arrangements now in place, review carefully what you need to bring with you. Contact your airline and/or the US Transport Security Administration if you have any questions or concerns.

## **Possible Practical Examination (Phase II) Procedure List**

- While this list is representative of the types of procedures that will be included in the examination, the AVDC and the Examination Committee reserve the right to include other procedures. Any procedures not on the list will not require equipment or supplies beyond those necessary for performing the procedures on the list.
- The goal of the practical examination is to evaluate clinical skills, judgment, and treatment planning.
- The choice of technique and materials to be used for each procedure is part of treatment planning, and it is up to the examinee to select an appropriate technique and to execute the procedure. Radiographs will be required for some procedures.
- Use this list to determine what equipment, instruments and supplies may be needed, so that you are fully prepared.

### **Periodontics**

1. Perform routine periodontal treatment (“prophylaxis”) on an assigned area.
2. Open curettage of single or multiple teeth.



3. Flap procedures of assigned type and location.
4. Use of a guided tissue regeneration technique for management of a periodontal defect. You will **NOT** be required to provide and place an actual guided tissue regeneration membrane.
5. Type II Crown Lengthening procedure.

### **Endodontics**

1. Pulpectomy (standard root canal treatment), specific tooth as directed.
2. Apicoectomy (surgical root canal treatment), specific tooth as directed.

### **Restorative**

1. Crown preparation for a metal or porcelain crown; appropriate impressions and bite registrations.
2. Restoration of a specific class and type of defect with an appropriate restorative for such, or with a restorative such as glass ionomer or composite as specified in the examination. Use of amalgam will **NOT** be required.
3. Crown wall restoration, including subgingival finish.
4. Crown lengthening procedure as part of placing a restoration.

### **Oral Surgery**

1. Surgical and/or non-surgical extraction of specified tooth or teeth.
2. Repair of an oronasal fistula on a specified area.
3. Intra-osseous or interdental wiring of specified teeth or area.
4. Palatal surgery.
5. Maxillectomy/mandibulectomy for the treatment of a neoplasm.
6. Noninvasive fracture repair techniques (intraoral splints).

### **Orthodontics**

1. Take an impression of a specified area with an appropriate material.
2. Application of a bracket, button, appliance, wire, elastics, or power chain as required or requested, appropriate for movement of a specified tooth or teeth.
3. Diagnosis of a malocclusion, recommendation of a treatment plan and preparation of laboratory instructions.

## **Reasons for Failure of Practical Examination Procedures**

Here is a comprehensive list of reasons contributing to grading a procedure as a failure, from recent AVDC examinations.

**General:**

Some requested items were not submitted. **Results in 35% penalty for all grading criteria related to that item.**

- Requested radiographs do not show the required structure(s).
- Stated specifications have not been met (e.g. mm of crown length to be created).

Patient care concerns, i.e. anything that would cause clinical problems in a patient if not attended to. Below is a list of examples. This list is not all inclusive. **Neglect of patient care results in a 5% penalty on all grading for that specimen.**

- Gauze or gross debris left in the mouth.
- Lip sutured to skin left in place.
- Mouth gag left in specimen's mouth.

Major procedural complications, i.e. anything that would cause the procedure to fail clinically. Below is a list of examples. This list is not all inclusive. **Major complications result in the grade for the procedure being multiplied by 0.70 as a penalty.**

- Incorrect tooth/area treated
- Wrong procedure performed
- Untreated pulp exposure
- Lack of biologic width preservation

Life-threatening/catastrophic complications, i.e. anything that would result in mortality or significant morbidity. This list is not all inclusive. **Life-threatening complications result in automatic failure of that core.**

- Brain perforation/herniation
- Orbital penetration
- Unnecessary removal of tissues such as the lips or tongue not related to the requested procedure

**Soft Tissue:**

- Inappropriate location or length of incision.
- Irregular edges of incised tissues.
- Major vessel appears to be severed but not ligated.
- Un-necessary exposure of bone.
- Inappropriate size of suture material.
- Gaps between sutures, sutures are too loose or too tight or are crowded, or suture knots are not secure.
- Tension at suture line.
- Debris present.
- Adjacent soft tissue has been damaged.

**Dental structures:**

- Inadequate or excessive removal of enamel or dentin, or unsupported enamel is present.
- Exposed dental surfaces have not been smoothed.
- Root is gouged or rough.
- Tooth gouged during preparation of adjacent tissues.

### **Gingiva and Periodontal Bone:**

- In addition to items in 'Soft Tissue', above:
- Calculus remaining on treated teeth.
- Biologic width is inadequate, gingiva is damaged or poorly adapted.
- Bone is rough or inappropriately shaped.
- Root is exposed.
- Perforation near or into the nasal cavity.
- Flap is poorly designed, and is insufficient to cover the defect without tension, or the width:length ratio is inadequate.
- Flap is loose or is perforated or is poorly adapted to bone.
- Tooth damage created during preparation of bone.
- Crown lengthening: In addition to above, insufficient additional length achieved; incorrect technique (I vs. II).

### **Impressions and Bite Registrations:**

- Impression tray is not included, is flexible or is too large.
- Impression material is not fully mixed; light body/wash not appropriately distributed.
- Not all relevant teeth are included in the impression.
- Cuspal show-through as a result of insufficient height of impression material.
- Bubbles or other defects such as drag lines are included in the impression.
- Bite registration is inappropriately designed and fabricated – the bite is not correctly registered.

### **Oral Surgery:**

- Poor or absent blood vessel management.
- Mass removal:
  - Inadequate or excessive extent of tissue resection.
  - Inappropriate design and length of flap incisions, causing tension or e.g. lip tuck, or tooth contacts flap.
- Extractions:
  - Excessive bone removal and inadequate alveoloplasty.
  - Excessive undermining of flaps and damage to adjacent tissue.

- Inadequate preparation or over-preparation of flap recipient site.
- Bone surfaces rough and irregular, debris in alveolus beneath suture line or on exposed bone.
- Retained root tip; root tip in mandibular canal.
- Exposure of mandibular canal.
- Alveolus of canine tooth is fractured and mobile.
- Fracture repair:
  - Poor wiring technique, splint is excessive or design is poor - prevents occlusal closure or causes excessive soft-tissue coverage.
  - Splint has rough edges or debris found; weak bonding of splint to teeth – easily displaced; occlusal interference.

### **Endodontics**

- Access is misdirected or is too shallow or over-prepared or there is damage of adjacent enamel.
- Canal is over-instrumented or is inappropriately instrumented.
- Failure to clean the coronal portion if a separate access is made.
- Obturation is incomplete or of variable density or has obvious voids.
- Tooth split by excess obturation pressure.
- Debris in access site, or sealer is present on walls of access site.
- Excessive apical extrusion.
- Apicoectomy: Inappropriate location or length of incision; inadequate bone preparation or excessive or rough edges to cavity in bone; root surface at apicoectomy not smooth; perforation into nasal cavity; voids in apical fill; overfill and flash; restoration inadequate or not performed; site closure incomplete or sutures are tight.

### **Operative Dentistry:**

- Preparation for restoration: insufficient or of excessive depth, or enamel is undercut, or extends to the bone edge or margins and surfaces are not smooth, or bone management is poor.
- Root trauma.
- Buccal bulge is excessive or preparation is over-filled.
- Crown preparation margin is irregular in width, in height to gingiva or is undercut, and surface of preparation is gouged or rough.
- Restorative material is not fully cured.
- Soft tissue damage.

### **Orthodontics**

- Inappropriate choice of or location of attachment device for anchor and/or target teeth.
- Active force device not appropriately loaded.
- Appliance will cause occlusal interference or soft tissue damage.
- Appliance not securely attached.
- Appliance design will not cause required tooth movement.
- Appliance not finished.
- Gingival or tooth damage created.

## **Suggested Reading List for Candidates and Residents**

The following list is provided as suggested reading material. It is not all inclusive of every potential reference and publication, because the body of scientific literature is fluid and always changing. **No attempt is made to restrict examination questions to the material in these references.** The examination reflects the current state of knowledge in veterinary dentistry rather than material from a particular group of references. Much of veterinary dental knowledge has been derived from human dentistry. This is reflected in the suggested reading list and will also be reflected in the examination itself.

### **Books**

#### Anatomy:

1. Evans HE. *Miller's Anatomy of the Dog*. 5<sup>th</sup> ed. Philadelphia: WB Saunders, 2020.
2. Schroeder HE. *Oral Structural Biology*. New York: Thieme Medical Publishers, 1991.

#### Anesthesia:

1. Tranquilli WJ and et al eds. *Lumb & Jones Veterinary Anesthesia and Analgesia*. 5<sup>th</sup> ed. Baltimore: Williams & Wilkins, 2015.

#### Dental Materials:

1. Anusavice KJ and et al eds. *Phillips' Science of Dental Materials*. 12<sup>th</sup> ed. Philadelphia: WB Saunders, 2012.
2. Sakaguchi R and et al eds. *Craig's Restorative Dental Materials*. 15<sup>th</sup> ed. St. Louis: Mosby Elsevier, 2019.

#### Embryology:

1. Nanci A. *Ten Cate's Oral Histology: Development, Structure, and Function*. 9<sup>th</sup> ed. St. Louis: Mosby, 2016.

2. Chiego, DJ. Essentials of Oral Histology and Embryology: A Clinical Approach. 5th ed. Mosby Elsevier. 2018.

Endodontics:

1. Hargreaves KM and Berman L. *Cohen's Pathways of the Pulp*. 12<sup>th</sup> ed. St. Louis: Mosby, 2020.

Equine:

1. Easley J, Dixon PM, and Schumacher J. Equine Dentistry. 3<sup>rd</sup> ed. Philadelphia: Saunders, 2010.

2. Easley J. Advances in Equine Dentistry. Veterinary Clinics of North America: Equine Practice 29(2). Philadelphia: Saunders-Elsevier, 2013

Exotics:

1. Capello V, Gracis M, and Lennox, A. Rabbit and Rodent Dentistry. Philadelphia: WB Saunders, 2005.

2. Emily PE, Eisner E. Zoo and Wild Animal Dentistry. Hoboken:Wiley-Blackwell, 2021.

3. Quesenberry KE, et al. Small Mammal Dentistry in. Ferrets, Rabbits and Rodents Clinical Medicine and Surgery. 4<sup>th</sup> ed. Philadelphia: Elsevier, 2021. Online version

Orthodontics:

1. Proffit WR and et al eds. Contemporary Orthodontics. 6<sup>th</sup> ed. St. Louis: Mosby- Year Book, 2018.

Pathology:

1. Regezi JA, Sciubba JJ, Jordan RCK. Oral Pathology: Clinical Pathologic Correlations. 7<sup>th</sup> ed. Philadelphia: Saunders, 2016.

2. Murphy BG, Bell CM, Soukup JW. Veterinary Oral and Maxillofacial Pathology. 1<sup>st</sup> ed. Hoboken: Wiley & Sons, 2020.

Periodontology:

1. Newman MG, Takei H, Klokkevold PR, Carranza FA. *Carranza's Clinical Periodontology*. 13<sup>th</sup> ed. Philadelphia: Saunders, 2018.
2. Wolf HF, Rateitschak KH, Rateitschak EM, Hassell TM. *Color Atlas of Dental Medicine – Periodontology*. 3<sup>rd</sup> ed. New York: Thieme Medical Publishers, 2005.

#### Radiology:

1. DuPont GA and DeBowes LJ. *Atlas of Dental Radiography in Dogs and Cats*. St. Louis: Saunders Elsevier, 2009.
2. White SC and Pharoah MJ. *Oral Radiology: Principles and Interpretation*. 8<sup>th</sup> ed. St. Louis: Mosby, 2018.

#### Restorative Dentistry / Prosthodontics:

1. Ritter A. *Sturdevant's Art and Science of Operative Dentistry*. 7<sup>th</sup> ed. St. Louis: Mosby, 2018.

#### Surgery:

1. Fossum TW. *Small Animal Surgery*. 5<sup>th</sup> ed. St. Louis: Mosby, 2018.
2. Hupp JR, Ellis III E, Tucker MR. *Contemporary Oral and Maxillofacial Surgery*. 7<sup>th</sup> ed. St. Louis: Mosby, 2018.
3. Johnson SA, Tobias KM. *Veterinary Surgery: Small Animal*. 2<sup>nd</sup> ed. Philadelphia: WB Saunders, 2018.
4. Verstraete FJM, Lommer MJ, Arzi B. *Oral and Maxillofacial Surgery in Dogs and Cats*. 2<sup>nd</sup> Ed. St. Louis: Elsevier, 2020.

#### Small Animal Dentistry:

1. Holmstrom SE, Frost P, Eisner ER. *Veterinary Dental Techniques*. 3<sup>rd</sup> ed. Philadelphia: WB Saunders, 2004.
2. Holmstrom SE. *Veterinary Dentistry: A Team Approach*. 3<sup>rd</sup> ed. Saunders, 2019.



3. Holmstrom SE. Veterinary Dentistry. Veterinary Clinics of North America: Small Animal Practice. 35(4), p. 763-1072. Philadelphia: Saunders-Elsevier, 2005.
4. Holmstrom SE. Clinical Veterinary Dentistry. Veterinary Clinics of North America: Small Animal Practice. 43(3) p. 447-689. Philadelphia: Saunders-Elsevier, 2013.
5. Reiter AM, Gracis M, eds. BSAVA Manual of Small Animal Dentistry. 4<sup>th</sup> ed. Quedgeley: British Small Animal Veterinary Association, 2018.
6. Verstraete FJM, Tsugawa AJ. Self-Assessment Color Review of Veterinary Dentistry. 2<sup>nd</sup> ed. Boca Raton: CRC Press, 2015.
7. Lobprise HB and Dodd JR. Wiggs Veterinary Dentistry Principles & Practice. 2<sup>nd</sup> edition Wiley Blackwell, 2019.
8. Berkovitz B and Shellis RP. The Teeth Of Mammalian Vertebrates 1<sup>st</sup> ed. Academic Press, 2018.

**Journals and Periodicals:**

1. Journal of Veterinary Dentistry: 2011 to present (with certain very important articles from prior to 10 years)
2. Dixon PM (2008) Equid Dentistry. The Veterinary Journal, 178(3) 307-424.
3. Journal of Endodontics\* (articles as referenced in JVD Abstracts section)
4. Journal of Periodontology\* (articles as referenced in JVD Abstracts section)
5. Journal of Clinical Periodontology\* (articles as referenced in JVD Abstracts section)
6. Journal American Dental Association\* (articles as referenced in JVD Abstracts section)
7. American Journal of Dentistry\*(articles as referenced in JVD Abstracts section)
8. Frontiersin.org, particularly the Veterinary Dentistry and Oromaxillofacial Surgery section (online journal: <http://journal.frontiersin.org/journal/veterinary-science/section/veterinary-dentistry-and-omaxillofacial-surgery#archive>)

**Other suggested journals that contain some valuable oral-dental articles, and that are AVDC-approved for meeting the AVDC Credentials Publication Requirement:**

1. American Journal of Veterinary Research
2. Journal of the American Animal Hospital Association
3. Journal of the American Veterinary Medical Association
4. Journal of Small Animal Practice
5. Journal of Feline Medicine and Surgery

6. Journal of Veterinary Internal Medicine
7. Veterinary Comparative Orthopaedics and Traumatology
8. Veterinary Pathology
9. Veterinary Radiology & Ultrasound
10. Veterinary & Comparative Oncology
11. Veterinary Surgery

## **Passing Score, Examination Results, Repeat Examinations**

### **Phase I - Multiple Choice Question Examination**

A pre-set Pass cut score is NOT used. All questions are 'criterion-referenced' using the modified Angoff procedure to determine the degree of difficulty of that question for a minimally qualified entry-level veterinary dental specialist. The mean of the Angoff scores of the questions included in the examination is the pass cut-score. Typically, the mean Angoff score is in the region of or slightly below 70%.

### **Phase II - Practical Examination**

The scoring standards for the practical portion of the examination are scored based on likely clinical success of the procedure and based on generally accepted dental techniques as found in current textbooks and journals and practiced by Diplomates of the AVDC. For each procedure, a grading system of 0-100 based on predetermined criteria is used. The passing grade for a single procedure is 70%. All four core disciplines must be passed to pass the Phase II examination. The core disciplines are: periodontics, endodontics, oral surgery and operative/restorative/orthodontics. The scores of the graders are averaged for each specimen. The final grade of the practical examination is the average score of the procedures assigned. The Examination Committee reserves the right to recommend to the AVDC Board of Directors to fail a candidate in the practical examination, irrespective of the score obtained, if an error was performed by the candidate that would, in a clinical situation, result in serious harm to the patient.

For successful passing of the Phase II examination, a candidate must have passed each core discipline with  $\geq 70\%$  for the tested procedures in that core. The examination fee for Phase II will be the same for all candidates regardless of which cores, or how many cores, are taken.

Candidates returning to take any remaining cores of the Phase II examination will be required to be present for the entire examination process. All candidates must attend the Examination Security meeting held the evening before the first examination day. Candidates will not be allowed to remove their equipment or pack up until after the final core session is completed. The specific day and start time of each core session will be

provided to all candidates at the Examination Security meeting.

### **Disclosure of Examination Results**

Candidates will receive written notification of whether or not they passed Phase I of the examination within 45 days of the date of the examination. Results for all candidates are sent on the same day.

Candidates who are not successful in passing Phase I will be provided with an explanation of the deficiencies that prevented their passing the examination.

For Phase I of the examination, information will be made available on whether the candidate passed or failed each major discipline category of the examination.

For Phase II of the examination the specific procedures that the candidate failed will be listed for the candidate. In addition, this document includes a comprehensive list of reasons for failing particular procedures in several recent years.

Actual scores will not be released to candidates.

### **Repeat Examinations**

The AVDC certifying examination has two parts: Phase I (written questions) and Phase II (practical examination). Candidates must pass Phase I of the certifying examination to be eligible to sit for Phase II.

Beginning with the first examination after approval of the credentials application, candidates shall have a limit of three attempts in consecutive years for each phase of the examination, with the exception of one deferral year, and subject to the requirement that candidates must have passed the Phase I examination in order to be eligible for the Phase II examination. Candidates who fail to pass either phase I or II of the certifying examination in three consecutive years, including a possible deferral year, may opt to resubmit a new credentials package fulfilling the current credentials. Exceptions to this limit on number of examination attempts may be made by the Board of Directors following petition from the candidate for one additional attempt per phase of the examination; the petition must include the candidate's proposed examination preparation action plan, which is subject to review and approval by the Board. The Board shall have the right to consider extenuating circumstances.

Candidates wishing to retake Phase I or Phase II of the examination are to complete, sign and submit the Re-Examination Form, which is available for down-loading from the AVDC web site, in the Examination documents section of the Information for Registered Trainees page.

## **Examination Security and Candidate Misconduct**

Any questions before the examination regarding the examination are to be directed via e-mail to the Executive Secretary of the AVDC ([ExecSec@AVDC.org](mailto:ExecSec@AVDC.org)) or, if the Executive Secretary is unavailable, to the Chair of the Examination Committee. Questions will be answered in writing and copies will be sent to all candidates. It is strictly forbidden to have direct or indirect contact with other members of the Examination Committee regarding the process, format or content of the examination, from the date that an applicant is notified that s/he is a candidate for the examination until the examination has been completed. Any breach of these rules can be considered reason for action by the Board of Directors to deny a candidate admission to the examination.

The Small Animal Examination Committee leaders for the 2022 Examination consist of: Naomi Hoyer (Chair), Brenda Mulherin (Chair-Designate), and Emily Edstrom (Past-Chair).

Robert Malinowski, DVM, MA, PhD from Veterinary Specialty Exams, LLC consulting services will be assisting with examination security procedures, calibration, and overall test analysis.

**Examination security is a primary concern for AVDC.** Do not bring personal materials (e.g. notes, books, tape recorders, photographic devices, calculators, computers, cellular phones) to the examination room. References are not to be consulted during the examination process, and self-archiving of radiograph images is breach of exam security and confidentiality. The examination material is not to be divulged to others. See the specific language in the Examination Security Form. Suspicious behavior during either Phase 1 or Phase 2 Exams may cause the candidate's examination results to be invalidated.

**Candidates:** Complete and sign the Examination Security Form and return it to the AVDC Executive Secretary by October 31<sup>st</sup> of the year before the examination for the Phase I examination and by March 1<sup>st</sup> for the Phase II examination. The Examination Security Form (EXAM-950) is available on the Preparing for the AVDC Examination section of the Resident Resources section of the AVDC website.

## **AVDC POLICY ON APPEAL OF ADVERSE DECISIONS**

The AVDC Policy and Procedures (Form EXAM-970) is available on the Preparing for the AVDC Examination link on the Resident Resources page of the AVDC web site.