# AMERICAN COLLEGE OF VETERINARY SURGEONS

# Phase II Surgical Competency Examination Information Pamphlet

AMERICAS AND EUROPE: FEBRUARY 3-4, 2025

ASIA AND OCEANIA: FEBRUARY 4-5, 2025



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Note: This pamphlet reflects the policies and procedures as of May 2024. All policies and procedures are subject to change. If you have any questions or require further information, please visit  $\underline{www.acvs.orq}$  or contact the ACVS staff at (301) 916-0200 x123.

#### REQUIREMENTS FOR BOARD CERTIFICATION

In order to achieve board certification, individuals must obtain each of the credentials outlined below.

- A. Acceptance into an ACVS Registered Residency Training Program.
- B. Successful completion and approval of all Resident Training Requirements.
- C. Successful submission and acceptance of a scientific manuscript in an approved journal as outlined in the <u>Publication</u>

  Requirement.
- D. Submission and acceptance of a <u>Credentials Application</u>.
- E. Successful passing of all components of the **Examination**.

The ACVS Examination consists of two parts: Phase I Surgical Knowledge and Phase II Surgical Competency.

# **ELIGIBILITY AND LIMITATIONS**

#### ELIGIBILITY FOR THE PHASE II EXAMINATION

To be eligible to sit for the Phase II examination, candidates must have successfully completed all resident training requirements, passed the Phase I examination, and have had their credentials application approved by the ACVS Board of Regents. Prospective examinees may register with ACVS for the examination prior to acceptance of their credentials by ACVS so that they can reserve a seat at a test center. However, sitting the examination is contingent upon acceptance of credentials. Should an individual's credentials application not be accepted by ACVS, the test appointment must be canceled.

#### RETAKING THE EXAMINATION

Candidates who fail one or both sections of the examination the first or second time and plan to retake those sections must register with ACVS by the established registration deadline in the year immediately preceding the desired examination.

Only the sections not yet passed must be taken on the second or third attempt. Candidates should be sure that the ACVS office has their current contact information, including email. Candidates who did not pass the examination will be assigned advisors who are current members of the Examination Committee. The advisors will be available to counsel candidates on their previous examination performance, including recommendations for future preparation.

#### CANDIDATES WHO DID NOT PASS THE THIRD ATTEMPT

To be eligible to continue in the process, candidates must submit a <u>recredentialing application</u> that is approved by the ACVS Board of Regents.

Failure to successfully complete all required sections of the examination within three (3) attempts will require submission of a <u>recredentialing application</u> to the Resident Credentialing Committee. Upon approval of the application by the ACVS Board of Regents, complete Phase II re-examination is required, including any section that was previously passed. Candidates have three additional attempts to pass both sections of the Phase II examination. Candidates should contact the ACVS office regarding current credentials application requirements.

#### LIMITATIONS

Candidates are allowed a maximum of six total attempts within nine years from acceptance of their credentials application to pass the Phase II examination. Any candidate who has not passed the examination after six attempts will be required to

restart the process to achieve ACVS board certification and meet all requirements (new residency, Phase I examination, and acceptance of credentials, etc.) before being allowed any future attempts.

Candidates whose credentials were first accepted in 2016 or earlier should contact ACVS certification programs staff regarding the limitations policy and continued eligibility for the Phase II examination.

#### POLICIES FOR DUAL CERTIFICATION CANDIDATES

Diplomates who desire to change their species of emphasis (i.e., are seeking Dual Certification) must have had their Dual Certification application or recredentialing application approved by the ACVS Board of Regents. Dual certification candidates must pass Phase II within three attempts. Recredentialing is required after three attempts.

#### RETAKING THE EXAMINATION

Dual certification candidates who fail one or both sections of the examination the first or second time and plan to retake those sections must register with ACVS by the established registration deadline in the year immediately preceding the desired examination. **Only the sections not yet passed must be taken on the second or third attempt**. Candidates should be sure that the ACVS office has their current contact information, including email. Failed candidates will be assigned advisors who are current members of the Examination Committee. The advisors will be available to counsel candidates on their previous examination performance, including recommendations for future preparation.

#### CANDIDATES WHO DID NOT PASS THE THIRD ATTEMPT

Failure to successfully complete all required sections of the examination within three (3) attempts per examination will require submission of a <u>recredentialing application</u> to the Resident Credentialing Committee. Upon approval of the application by the ACVS Board of Regents, complete Phase II re-examination is required, including any section that was previously passed. Candidates have three additional attempts to pass both sections of the Phase II examination.

## LIMITATIONS

Dual Certification candidates are allowed a maximum of six total attempts within nine years from acceptance of their Application for Dual Certification to pass the Phase II examination. Any candidate who has not passed the examination after six attempts will be required to restart the retraining process to achieve ACVS board certification in the alternate species and meet all requirements before being allowed any future attempts.

# TAKING THE PHASE II EXAMINATION

Candidates sitting the examination for the first time (including Dual Certification candidates) must take both the case-based and practical sections. Candidates sitting the examination for the second or third time must take the sections not successfully completed. Both sections of the Phase II examination must be successfully completed to become certified by the American College of Veterinary Surgeons.

# CERTIFICATION FOR SUCCESSFUL CANDIDATES

Candidates who pass the Phase II examination will be issued a time-limited certificate indicating that they are a Diplomate of the American College of Veterinary Surgeons in Small Animal Surgery or in Large Animal Surgery. Dual Certification candidates will be issued time-limited certificates indicating that they are a Diplomate of the American College of Veterinary Surgeons in the new specialty.

Time-limited certificates will be good for five (5) years. Diplomates with time-limited certificates will need to document continuous professional development through a variety of activities, such as attending or presenting at continuing education meetings, publishing manuscripts, serving on select ACVS committees, and participating in resident training. The requirements for maintenance of certification are posted on the ACVS website.

#### **EXAMINATION SCHEDULE**

The 2025 Phase II Surgical Competency Examination will be held at Pearson VUE Professional Test Centers. Candidates testing in the Americas and Europe will take the examination February 3–4, 2025, while candidates testing in Asia and Oceania will take the examination February 4–5, 2025.

Location	Date	Session
Virtual	January (day to be determined)	Examination Information Session
Americas and Europe	Monday, February 3	Small Animal Practical—Parts 1 and 2 Large Animal Case Based—Orthopedic/Neurosurgery and Soft Tissue
Americas and Europe	Tuesday, February 4	Small Animal Case-based—Orthopedic/Neurosurgery and Soft Tissue Large Animal Practical—Parts 1 and 2
Asia and Oceania Tuesday, February 4		Small Animal Practical—Parts 1 and 2 Large Animal Case Based—Orthopedic/Neurosurgery and Soft Tissue
Asia and Oceania	Wednesday, February 5	Small Animal Case-based—Orthopedic/Neurosurgery and Soft Tissue Large Animal Practical—Parts 1 and 2

# **EXAMINATION DESCRIPTION**

The examination is composed of two (2) sections: case-based and practical. There are separate examinations for large and small animal candidates. Each section is administered over a four-hour examination period, with an optional break of up to 15 minutes mid-way through.

- During the optional break, candidates may access food/snacks in their lockers, as well as medication and comfort
   <u>aids as defined by Pearson VUE</u> (e.g., cough drops, inhaler, diabetic tools—see link for full list). Candidates are not
   permitted to access notes, phones, or study materials during the breaks. Food and drink are prohibited within the
   testing rooms.
- Candidates are allowed to take unscheduled breaks. Please note, however, that test time will not stop during unscheduled breaks. Unscheduled breaks are discouraged during the exam as limited time is allowed for each "page" of questions and the candidate is not allowed to return to previous pages.

The Phase II examination tests all phases of surgery in all species and types of animals pertinent to the specialty (small animal or large animal) as well as competence in non-species-specific knowledge categories. The general content (and the weight of each content area) for the case-based and practical sections has been determined by means of an analysis of the veterinary surgeon's occupation. In all, five hundred twenty-four (524) American College of Veterinary Surgeons (ACVS) Diplomates participated in the study that examined the importance of a variety of content areas for performance as a veterinary surgeon. Questions for the Phase II examination are written and reviewed by the ACVS Examination Committee. Literature questions are validated by securing a reference source that corroborates the information in the question. References include veterinary textbooks, veterinary medical and surgical journals, and medical texts and journals including, but not limited to, the recommended reading list.

#### CASE-BASED SECTION

The case-based section will be comprised of two parts, orthopedic/neurosurgery and soft tissue. The case-based section tests the candidate's management of a sequentially presented surgical case(s) prior to, during, and after surgery. Candidates will be provided visual and descriptive information on the case and should be prepared to answer questions covering all areas of surgical practice. There are four cases and a literature section in each part of the case-based section. Each part of the case-based section will be administered over approximately 110 minutes, with a break of up to 15 minutes between parts. Each "page" of questions in the case-based section is allotted a pre-determined amount of time. As cases are presented in a sequential fashion, the candidate will not be allowed to return to a previous page after moving on to the next. There is no period to review previous answers at the end of each part of the case-based section. Each part of the case-based section will be worth 250 points and a minimum of 20% of the points for the examination will be based on the suggested reading of the current literature. For each part of the examination, literature questions will be incorporated both into the cases and in a small separate section comprised of literature questions unassociated with cases. Questions are prepared each year by members of the Examination Committee. Examination Committee members and several members of the Board of Regents review all questions and visual materials for clarity and fairness. Each candidate's case-based examination section is graded according to a pre-set scoring guide by multiple Examination Committee members who are blinded to individual candidate identity.

#### PRACTICAL SECTION

The practical section will be comprised of a total of 32 questions based on visually presented material of surgically-related diseases or conditions. Candidates will be provided visual images (still and/or videos), as well as descriptive information for each question. Visual material may depict anatomic specimens, instruments, surgical diseases, pathologic/histologic specimens, imaging studies, or other relevant information to test the candidate's recognition and interpretive skills covering all areas of surgical practice. The practical section is split into two equal parts of 16 questions. Each part of the practical section will be administered over approximately 110 minutes, with a break of up to 15 minutes between parts. The questions are answered in a sequential fashion and the candidate cannot move backwards within the exam. There is no period to review previous answers at the end of each part of the practical section. Each question has approximately 6.8 minutes for answers to be entered. Each question will be worth 12 points and a minimum of 20% of the points for the examination will be based on the suggested reading of the current literature. New questions are prepared each year by members of the Examination Committee to correspond to the topic areas in the examination blueprint. Examination Committee members and several members of the Board of Regents review all questions and visual materials for clarity and fairness. Each candidate's practical examination section is graded according to a pre-set scoring guide by multiple Examination Committee members who are blinded to individual candidate identity.

# **EXAMINATION RULES**

The integrity of the Phase II Examination of the American College of Veterinary Surgeons will be maintained to ensure fairness to all candidates during the test. Any questions or concerns should be directed to the Ombuds via the ACVS office.

#### REGISTERING FOR THE EXAMINATION

Complete registration for the examination consists of submitting the online application and paying the examination fee.

The deadline to apply for the examination is July 22, 2024. The online registration process must be completed by 11:59 pm Eastern Daylight Time (EDT). ACVS will not allow late submission of registration due to computer or internet issues.

The examination fee must be paid online as part of the online registration no later than November 7, 2024. Mailed examination fee payments must arrive by close of business, 5 pm Eastern Standard Time (EST) on November 7, 2024, at the ACVS office. ACVS will not allow late payment due to delivery service problems, insufficient postage, international customs, computer/internet issues, etc.

#### SUBMIT THE ONLINE REGISTRATION APPLICATION

Deadline: Submit your application no later than 11:59 pm EST, July 22, 2024.

Candidates must register online for the Phase II Examination in <u>CERT</u>. Online registration opens May 23 for eligible candidates. During the registration process, candidates will need to:

- 1. Provide their full name as it appears on a government-issued photo ID. Candidates are required to show one (1) VALID government-issued photo ID with signature at the test center. The first and last names on the ID must match the names provided during the registration process exactly or the candidate will be turned away from the test center.
- 2. Provide their current address to assist with Pearson VUE appointment scheduling, as well as a mobile phone number.
- 3. Indicate whether they wish to <u>request an accommodation</u> for a disability or a health-related concern. Candidates requesting accommodations must indicate desired accommodations and upload <u>all</u> supporting documentation from an appropriate health care professional (e.g., physician, psychologist, psychiatrist) certifying the disability.
- 4. Agree to the terms and conditions of the *ACVS Phase II Surgical Competency Examination Contract*. Candidates who fail to agree with these terms will not be allowed to take the Phase II examination.
- 5. Pay the examination fee or choose the Pay By Check Option to submit a payment before the November 7 deadline.

# PAY THE EXAMINATION FEE

**Deadline**: Pay the examination fee online no later than **11:59 pm (EST), November 7, 2024.** The fee is paid as part of the registration process in CERT. Mailed examination fee payments must arrive *by close of business, 5 pm (EST) on November 7, 2024,* at the ACVS office.

Fee for first-time candidates = \$2,620

Fee for repeat candidates = \$1,875

Available to candidates who have taken the Phase II examination previously or who are in the dual certification process.

The examination fee is refundable only due to extenuating circumstances (see <a href="Cancellation and Refund">Cancellation and Refund</a>).

#### CONFIRMATION

Candidates will receive an email upon successful submission of their online registration. This email indicates only receipt of the registration and payment and does not indicate that the registration process is complete. ACVS staff will review the registration application for completeness within 7–10 business days and contact candidates with any questions.

Candidates whose examination materials are in order will receive an *Examination Authorization* email from ACVS on or shortly before August 19, 2024. This email will include the Candidate ID number and Authorization ID number. Both numbers are required to schedule and take the examination at a Pearson VUE test center. Each candidate should review the information on the authorization email carefully, as this information will indicate the sections of the examination for which the candidate is registered, and it is the candidate's responsibility to notify the ACVS office immediately of any perceived inaccuracies.

If a candidate submits a registration application and has not received the Examination Authorization email from ACVS as of August 19, the candidate should contact the ACVS staff immediately. Note: Candidates are responsible for notifying ACVS of any address and email changes prior to and following the examination.

#### REQUESTING AN ACCOMMODATION

ACVS complies with the Americans with Disabilities Act (ADA) of 1990 and the ADA Amendments Act of 2008. To ensure equal opportunities for all qualified persons, ACVS will provide reasonable accommodations for candidates when appropriate. Additionally, ACVS will provide reasonable accommodations for certain health-related needs.

All candidates who intend to take the 2025 ACVS Phase II Surgical Competency Examination must indicate whether they wish to request an accommodation during online registration. If a disability or impairment is identified after the registration deadline, the candidate must notify ACVS within 30 days of the diagnosis or recognition of the disability or impairment. ACVS will consider requests received up to 60 days prior to the examination but cannot guarantee that such requests will be granted or that a candidate will be able to keep their current appointment if accommodations are granted.

Candidates who request accommodations will be notified separately of the determination. The Phase II examination is conducted at test centers. The test centers are not authorized to make accommodations that have not been approved by ACVS. Certain accommodations are offered at only select test centers.

Accommodations are not required for items on the Pearson VUE comfort aids list.

Accommodations will not be granted retroactively. Therefore, if a candidate informs ACVS of impairment or disability after an examination has been completed, no changes can be made to that candidate's examination results or to how that candidate's examination is graded.

#### ACCOMMODATION REQUESTS FOR DISABILITIES

Candidates who request an accommodation will need to indicate the type of disability, how long they have had the disability, and the type of accommodation requested. Additionally, past accommodations made in college or veterinary school must be indicated.

The following documentation must be uploaded into the CERT system. This documentation will be reviewed by ACVS staff and select members of the Examination Committee, for the purpose of ensuring the correct documentation has been submitted and evaluating the request for the accommodation.

Written documentation from an appropriate health care professional (e.g., physician, psychologist, psychiatrist)
certifying your disability and the accommodation being requested. This documentation must be on letterhead, dated,
and signed, and must include the name, title, professional credentials, and contact information of the qualified health
care professional.

- a) For physical or sensory disabilities of a <u>permanent or unchanging nature</u> (e.g., loss of limb, loss of hearing), documentation must include a brief statement from a qualified professional confirming the condition and describing the impact of the disability on the individual.
- b) For disabilities of a non-permanent nature, written documentation must be <u>current</u>\* and include:
  - i) a diagnosis of your health condition;
  - ii) when the diagnosis was originally made and reassessed, if applicable;
  - iii) a description of the assessment and a copy of the assessment; and,
  - iv) a specific recommendation and justification for the accommodation being requested.

\*Current written documentation is defined as having been completed within the following timeframes:

- last five (5) years for learning disabilities (LD), autism spectrum disorder (ASD), or intellectual disability
   (ID)
- last three (3) years for attention deficit hyperactivity disorder (ADHD) and all other disabilities, excluding physical or sensory disabilities of a permanent or unchanging nature
- last six (6) months for psychiatric disabilities
- 2. Attach written documentation from the institution with the dates and special services and testing accommodations you received during the course of your education because of your disability.

#### ACCOMMODATION REQUESTS FOR HEALTH-RELATED NEEDS

Candidates who have special needs that are not generally covered by the ADA (e.g., injury, broken limb, pregnancy, lactation) may request courtesy accommodations and submit applicable materials in CERT. Courtesy accommodations also include any requests to bring medical items or comfort aids not on the <u>Pearson VUE comfort aids list</u>. Candidates requesting accommodations due to lactation should review the Pearson VUE policy for Testing Exceptions for Nursing Mothers.

Candidates should indicate specific accommodations being requested and upload written documentation from an appropriate health care professional (e.g., physician) attesting to the health condition and supporting the accommodation being requested. This documentation must be on letterhead, dated, and signed, and must include the name, title, professional credentials, and contact information of the qualified health care professional. This documentation will be reviewed by ACVS staff and select members of the Examination Committee to ensure the correct documentation has been submitted and to evaluate the request for the accommodation.

#### SCHEDULING THE EXAMINATION AT A TEST CENTER

The Phase II examination is held at Pearson VUE test centers. For the 2025 examination, candidates may take the examination in their home countries, subject to appointment availability.

Based on the nature of the examination, ACVS requires candidates to take the Phase II examination at Pearson VUE Professional Test Centers to ensure the optimal testing experience. Pearson has three levels of test centers, and all types will appear in the scheduling system. A <u>list of Pearson VUE Professional Test Centers</u> is available online. Be certain to confirm that you have selected a Pearson VUE Professional Test Center when selecting the location in Pearson's scheduling system. Non-professional test centers are considered unsanctioned examination sites. Exceptions to this requirement will not be granted by ACVS.

Candidates may schedule their test appointment online at <a href="www.pearsonvue.com/acvs">www.pearsonvue.com/acvs</a> or by telephone. To schedule online, you must first create a Pearson VUE web account. *Please note that account activation may require up to 24 hours*. Pearson VUE will notify you by email when your account is activated.

To schedule your examination and to create an online account, you will need the Candidate ID and Authorization ID from your *Examination Authorization* email (emailed by ACVS no later than August 19, 2024). Test appointments may be made up to one business day in advance but be aware that many test centers fill prior to the examination period. You are encouraged to schedule your appointment as soon as you receive the account activation email from Pearson VUE.

Please note that ACVS candidates are competing for space at test centers with candidates from other examinations. ACVS has made every attempt to authorize candidates as early as possible before the scheduled examination date. **Candidates should make appointments with Pearson VUE promptly after receiving their Examination Authorization email to ensure an appointment with minimal travel required.** 

#### CANCELLATION AND REFUND

#### CANCELLATION DUE TO DENIAL OF CREDENTIALS BY ACVS

In the event that a prospective examinee's credentials application is not accepted by ACVS, the candidate must cancel their Pearson VUE appointment. The candidate must contact ACVS to request a refund if the examination fee has been paid.

#### CANCELLATION DUE TO UNFORESEEN CIRCUMSTANCES FOR APPROVED CANDIDATES

In the event that a candidate needs to cancel their examination registration, the candidate must inform ACVS and also cancel the Pearson VUE appointment with Pearson.

#### **NO-SHOW FEES**

Failure to cancel the Pearson VUE appointment more than 24 hours prior to the scheduled start time will result in a no-show fee for which the individual is responsible. ACVS will invoice such candidates for the fee (\$100-300 per section, depending on appointment length) following the examination dates or deduct the no-show fee from any refund of the examination fee.

#### **REFUND REQUESTS**

Examination fees will be refunded less a \$75 administrative fee if a candidate withdraws more than 30 days before the examination. If a candidate withdraws within 30 days of the examination, fees will be refunded only in cases of extenuating circumstances (e.g., death in the family, medical emergency). **All refunds must be requested in writing.** No-show fees will be deducted from any refund if the candidate was not previously invoiced. Allow 30 days for processing refund requests. All requests for refunds must be submitted in writing using one of these methods:

Mail: ACVS

19785 Crystal Rock Drive, Suite 305

Germantown, MD 20874

**USA** 

Email: acvs@acvs.org

Fax: (301) 916-2287

#### AT THE TEST CENTER

Candidates should refer to the most up-to-date details in their confirmation email from Pearson VUE, as well as the Pearson website at <a href="https://home.pearsonvue.com/coronavirus-update">https://home.pearsonvue.com/coronavirus-update</a> for the latest policies and requirements.

- Candidates should arrive at the test center at least 30 minutes before the scheduled appointment time. This will give
  you adequate time to complete the necessary sign-in procedures. Please be prepared to show one piece of current,
  government-issued identification in the name in which you registered, bearing your photograph and signature.
  Acceptable forms of government-issued identification include photo-bearing driver's licenses and passports. It is
  important that the ID you provide identically matches the name with which you registered and is up to date (e.g.,
  expired passports do not count as valid ID.)
- 2. If you arrive more than 15 minutes late for your appointment, you may be refused admission.
- 3. No personal items may be taken into the testing room. This includes all bags, books not authorized by the sponsor, notes, phones, pagers, watches, and wallets. Personal items are stored in lockers.
- 4. Giving or receiving assistance pertaining to information on the examination prior to, during, or after the test period is unethical and not permitted. (See <a href="Examination Security">Examination Security</a>.)
- 5. The use of information aids during the examination is not permitted.
- 6. Candidates will be provided with erasable whiteboards to use during the examination.

#### TEST CENTER AVAILABILITY/CONTINGENCY PLANNING

The Phase II examination is offered only one time each year. In the event of widespread test center closures, ACVS will notify candidates as soon as possible of any alternative/contingency plans that have been enacted. ACVS cannot guarantee that alternatives will be offered.

#### 2025 ACVS PHASE II EXAMINATION READING LIST

The following references and books are suggested reading in addition to the current Phase I reading list for preparation for the 2025 Phase II examination. Other textbooks and current references may be pertinent. A substantial understanding of basic and applied physiology and anatomy is assumed.

Unless otherwise indicated, all chapters apply.

#### SELECTED REFERENCES FOR SMALL ANIMAL SURGERY

- 1. Johnston, S., and K. Tobias. Veterinary Surgery: Small Animal. 2nd ed. Elsevier, 2018.
- 2. Fossum, T. W. Small Animal Surgery. 5th ed. Mosby Co., 2018.
- 3. Johnson, A. L., J EF Houlton, and R Vannini. *AO Principles of Fracture Management in the Dog and Cat*. AO Publishing, 2005. *Chapters 1, 2, 3, 20, 27*.
- 4. Kudnig, S. T., and B. Seguin, eds. Veterinary Surgical Oncology. 2nd ed. Wiley, 2022.

Knowledge of basic and applied physiology, pharmacology, anesthesia, and basic applied anatomy is assumed and should be reviewed in an appropriate text; for example, from the Phase I reading list:

- 1. Hall, J.E., and M.E. Hall. *Guyton and Hall Textbook of Medical Physiology*. 14th ed. W.B. Saunders Co., 2020. *Chapters 4-13, 16, 20, 22, 25, 30-31, 37-43, 50, 61, 63-65.*
- 2. Hermanson, J. W., and A. de LaHunta. Miller's Anatomy of the Dog. 5th ed. Elsevier, 2019.
- 3. Grimm, K., L. Lamont, W. Tranquilli, S. Greene, and S. Robertson, eds. *Veterinary Anesthesia and Analgesia, The 5th of Lumb and Jones*. 5th ed. Wiley-Blackwell, 2015. *Chapters 1-36, 44-45,* 53-57.
- 4. Boothe, D. M. Small Animal Clinical Pharmacology and Therapeutics. 2nd ed. Elsevier, 2011. Chapter 6 (Principles of Antimicrobial Therapy), Chapter 7 (Antimicrobial Drugs), Chapter 19 (GI Physiology), Chapter 29 (Anti-Inflammatory Drugs).

#### SELECTED REFERENCES FOR LARGE ANIMAL SURGERY

- 1. Auer, J., and J. Stick. Equine Surgery. 5th ed. Elsevier, 2018.
- 2. Nixon, A. J., ed. Equine Fracture Repair. 2nd ed. Wiley-Blackwell, 2020.
- 3. Fubini, S. L., and N. G. Ducharme. Farm Animal Surgery. 2nd ed. W. B. Saunders Co., 2017.
- 4. McIlwraith, C. W., I. Wright, and A. Nixon. Diagnostic and Surgical Arthroscopy in the Horse. 4th ed. Elsevier, 2014.
- 5. Ragle, C. A., ed. Advances in Equine Laparoscopy. 1st ed. Wiley-Blackwell, 2012.
- 6. Theoret, C., and J. Schumacher, eds. *Equine Wound Management*. 3rd ed. Wiley, 2017.

Knowledge of basic and applied physiology, pharmacology, anesthesia, and basic applied anatomy is assumed and should be reviewed in an appropriate text. The Phase I reading list can be used as a guide.

Many journals contain articles pertaining to surgery (both human and veterinary) and should be perused for current literature.

For the 2025 examination, article-based questions will **primarily** come from articles published in the range of June 1, 2019—May 31, 2024 (five years) and June 1, 2021—May 31, 2024 (three years). This date range is based on the publication of content in print rather than online publication date. Questions may also come from older publications considered landmark articles that are significant and essential to the knowledge of the veterinary surgeon.

A partial list of veterinary journals includes:

#### JOURNALS FOR SMALL ANIMAL SURGERY CANDIDATES

#### FOR THE LAST FIVE YEARS

- Journal of the American Veterinary Medical Association
- Journal of Small Animal Practice
- Veterinary Comparative Orthopaedics and Traumatology
- Veterinary Surgery

#### FOR THE LAST THREE YEARS

- Journal of Feline Medicine & Surgery
- Journal of Veterinary Emergency and Critical Care
- Journal of Veterinary Internal Medicine
- Veterinary Radiology & Ultrasound

#### JOURNALS FOR LARGE ANIMAL SURGERY CANDIDATES

#### FOR THE LAST FIVE YEARS

- Equine Veterinary Journal & Supplements
- Equine Veterinary Education
- Journal of the American Veterinary Medical Association
- Veterinary Radiology & Ultrasound
- Veterinary Surgery

# PRACTICAL SECTION BLUEPRINT

Questions will pertain to surgical topics and conditions in:

- a) Small Animal Examination: Domestic canine and feline, and non-species-specific
- b) Large Animal Examination: Equine, food animal, small ruminant, camelid, and non-species-specific.

The test questions are distributed across a number of systems and categories. **The approximate percentage of questions devoted to each system/category is shown below:** 

# SMALL ANIMAL PRACTICAL SECTION

System/Category	% of Small Animal Questions
Gastrointestinal	16%
Cardiovascular/Hematopoietic	9%
Respiratory	13%
Urogenital	13%
Musculoskeletal	25%
Neurological/Special Senses	9%
Integumentary	9%
Endocrine	6%

#### LARGE ANIMAL PRACTICAL SECTION

System/Category	% of Large Animal Questions
Gastrointestinal	22%
Neurological/Special Senses	3%
Respiratory	16%
Urogenital	13%
Musculoskeletal	28%
Lameness and Imaging	3%
Cardiovascular/Hematopoietic	3%
Integumentary	6%
Surgical Preparation and Instrumentation	3%
Emergency and Critical Care	3%

#### CASE-BASED SECTION BLUEPRINT

Questions will pertain to surgical topics and conditions in:

- a) Small Animal Examination: Domestic canine and feline
- b) Large Animal Examination: Equine, food animal, small ruminant, camelid.

Each case may include diagnosis/imaging, procedure and instrumentation, decision making, prognosis and postoperative care, and literature. The distribution of cases will be:

#### SMALL ANIMAL CASE-BASED SECTION

- Orthopedics/neurosurgery: neurosurgery (1), fracture (1), arthritis/joint (1), and other (1)
- Soft tissue: Gastrointestinal (1), respiratory (1), urogenital (1), and other (1)

#### LARGE ANIMAL CASE-BASED SECTION

- Orthopedics: Fracture (1), arthritis (1), tendon ligament (1), and other (1)
- Soft tissue: Gastrointestinal (1), respiratory (1), urogenital (1), and other (1)

# **EXAMINATION INSTRUCTIONS**

An overview of the Phase II examination navigation is available online.

#### CASE-BASED SECTION INSTRUCTIONS

The case-based section tests surgical principles in case management prior to, during, and after surgery. Information about these cases is presented in the form of images, videos, and data. Images may be embedded in the page or may be accessed by clicking on the relevant hyperlink. Embedded images may be enlarged by clicking on the relevant hyperlink. Each part of the case-based section will also include a separate section with questions about recent literature not directly connected to a case. Each "page" of questions in the case-based section is allotted a pre-determined amount of time. Candidates can move forward when they are finished with each page. If the candidate has not moved forward before the allotted time has run out, the screen will automatically show the next page. As cases are presented in a sequential fashion, the candidate will not be allowed to return to a previous page after moving on to the next. A whiteboard will be provided for you to take notes during the examination. You can refer to these notes for the entire duration of the examination.

There is an optional 15-minute break between the orthopedic/neurosurgery and soft tissue portions of the case-based exam. It is strongly recommended that you <u>not</u> leave for any unscheduled breaks during either portion of the exam since questions cannot be revisited.

If a question asks for a specific number of responses, you will be graded on only the requested number of answers. Additional responses beyond the number requested will not be graded. For instance, if we ask you for one diagnosis and you give us two, we will grade only the first answer. Minimize the use of abbreviations to make sure your answer is clearly understood. Commonly used medical abbreviations may be used; however, if you are concerned that the grader may not understand the abbreviation, you should define it.

If technical difficulties are encountered during exam administration, candidates should notify the proctor. The proctor will follow up with ACVS, if needed, to determine the appropriate actions regarding timing and resumption of the examination.

#### PRACTICAL SECTION INSTRUCTIONS

The practical section is comprised of 32 questions divided into two parts of 16 questions each. Each question will have a set of images accompanying it. These questions are also answered in a sequential fashion with no ability to move back and forth within the examination. There are 110 minutes for the first 16 questions (6.8 minutes per question). There is an optional break of 15 minutes and then the second part comprised of another 16 questions with 110 minutes to complete. There is no review period. Images may be embedded in the page or may be accessed by clicking on the relevant hyperlink. Embedded images may be enlarged by clicking on the relevant hyperlink.

If a question asks for a specific number of answers, only that number will be graded. For example, if a question asks for two answers and you provide three answers, we will look at only the first two answers. Minimize the use of abbreviations to make sure your answer is clearly understood. Commonly used medical abbreviations may be used; however, if you are concerned that the grader may not understand the abbreviation, then you should define it.

If technical difficulties are encountered during exam administration, candidates should notify the proctor. The proctor will follow-up with ACVS, if needed, to determine the appropriate actions regarding timing and resumption of the examination.

#### EXPLANATION OF COMMON QUESTIONS ON THE PRACTICAL OR CASE-BASED SECTIONS

#### LABORATORY DATA

• "Interpret the laboratory data" or "Interpret the abnormal values": This means that you should indicate the most likely causes of each abnormality in this patient.

#### CASE EXAMPLE:

	Patient Values	Reference Range
Total protein (g/dl)	5.3	5.1 – 7.3
Albumin (g/dl)	3.0	2.6 – 3.5
Globulin (g/dl)	2.6	2.6 – 5.0
Alkaline phosphatase (U/L)	177	4.0 – 95
ALT (U/L)	363	26 – 200
Bilirubin (mg/dl)	0.25	0.1 - 0.3
CK (U/L)	211	92 – 357
BUN (mg/dl)	5	10 – 25
Creatinine mg/dl	0.7	0 – 1.3
Calcium (mg/dl)	9.6	9.5 – 11.8
Phosphorus (mg/dl)	4.5	3.3 – 5.8
Magnesium (mg/dl)	1.7	1.7 – 3.3
Glucose (mg/dl)	70	80 – 100
Cholesterol (mg/dl)	42	68 – 224
Bicarbonate (mmol/L)	18.6	13.9 – 30
Sodium (mEq/L)	148	146 – 160
Potassium (mEq/L)	4.8	3.5 – 5.9
Chloride (mEq/L)	118	108 – 125

1. Interpret the results of the chemistry profile.

Decreased BUN may be due to decreased production (e.g., hepatic insufficiency), lack of intake, or increased loss.

Decreased cholesterol may be due to decreased production (e.g., hepatic insufficiency) or increased loss. Hypoglycemia may be due to decreased production (e.g., hepatic insufficiency) or poor sample handling. Increased alkaline phosphatase may be due to increased production from bone (young dog) or cholestasis. Increased ALT indicates hepatocellular injury/necrosis (leakage enzyme). Results suggestive of hepatic insufficiency.

NOTE: Reference ranges will be provided for complete blood counts and serum chemistry panels. Reference ranges might not be provided for other laboratory data, such as blood gas analysis, electrolyte panels or fluid analysis.

#### DIAGNOSTIC IMAGING STUDIES

- "List the radiographic abnormalities" or "List the radiographic findings": This means that you should concisely describe each abnormality that you see on the radiographs. Be sure to indicate the side for lesions that can be bilateral. If you observe no abnormalities, then you should state this.
- "What is the radiographic diagnosis?" This means to indicate the most specific conclusion that you can make from the radiographic findings.

#### CASE EXAMPLE:

**Radiographic abnormalities:** The left osseous bulla is thickened and has increased soft tissue density.

Radiographic diagnosis: Left otitis media

"Assess the fracture repair": This means that you should critique the repair including both positive and negative
comments. This includes evaluation of the alignment, apposition or reduction, and apparatus or implants. For
example:

## CASE EXAMPLE:

Alignment is good. Reduction is not adequate because there is a gap at the fracture site. The most distal screw is too long.

#### DETERMINATION OF PASSING SCORE

For the case-based and practical examinations, the passing score is determined using a procedure called the direct consensus approach, which is a form of criterion referencing. In a criterion-referenced test, the decision about whether a given candidate passes or fails the test is based on whether they demonstrate criterion level job knowledge and skill on the examination (i.e., a sufficient level of job knowledge and skill to perform adequately on the job). The direct consensus approach involves the collection of judgments about the difficulty of each page of the exam. Difficulty judgments for the examination items are estimates of the average number of points a minimally qualified candidate will answer on each page. In this context, a "minimally qualified" candidate possesses just enough knowledge and skill to be a Diplomate of the ACVS. Difficulty judgments are made by board certified surgeons working in private practice and academia who serve on the Examination Committee and Board of Regents. The cut score is then set by combining the average page difficulty ratings across the exam.

#### **GRADING PROCESS**

- Exams will be graded with the points assigned to each question. The data will be entered into a spreadsheet and double-checked. Point totals will then be calculated by the computer.
- After grading is complete, cut scores will be set by the direct consensus method.
- For exams falling within 5 points of the cut score (once the cut score has been set), data entry will be rechecked. These exams will also be carefully reviewed by the Examination Committee members, referencing the exam key, to make sure that nothing was missed during the original grading process.

If an error is found that changes the candidate's score, then the exam will be discussed by the Examination Committee and a decision made.

#### REPORTING OF RESULTS

Results of the ACVS Phase II Surgical Competency Examination are emailed to all candidates between four and six weeks after the examination. This time frame allows for the Examination Committee to meet to complete the grading process, for the examination service to compile the results, and for the ACVS Board of Regents to review and approve the results.

Results will be sent to the email address in the candidate's ACVS record (<a href="www.acvs.org/my-account">www.acvs.org/my-account</a>). Results will indicate whether the candidate passed or failed each section of the examination (i.e., the practical and case-based). For candidates who fail, the feedback report will include performance on the areas within each section. Information regarding overall performance will be available from an appointed advisor for any candidate who fails a section of the examination. Advisors will not discuss performance on individual test items but may offer suggestions for improving performance on subsequent examinations.

#### **ADVISOR ASSIGNMENTS**

Candidates who do not pass the Phase II examination will be assigned an ACVS Examination Committee member as their advisor within 21 days of receiving their examination results. Upon request by the candidate, advisors will review the examination to identify areas of strength and weakness to provide guidance to the candidate in future attempts. It is the candidate's responsibility to contact their advisor and request a meeting to review their examination performance.

#### REQUESTS FOR RESCORING

Rescoring of the examination means that an employee of the examination consulting service reviews the examination to make sure that all scores were correctly calculated. Rescoring does not mean that the examination is regraded. Grading is performed by the Examination Committee and is not revisited in the rescoring process. Candidates who wish to pursue rescoring of their examination must email ACVS (certification@acvs.org) and the director of the Examination Committee within 60 days of notification by ACVS of the results. Prior to this communication, the candidate must have contacted and received feedback from their assigned advisor. The director of the Examination Committee will provide additional details to help the candidate decide if they wish to pursue rescoring.

If the candidate still wishes to have their examination rescored after the communication with the director of the Examination Committee, they must contact the ACVS office and pay the rescoring fee within ten (10) days of that communication. The rescoring fee is \$500. The ACVS office will inform the examination service of the rescoring request upon receipt of the fee. Every effort will be made to complete the rescoring process and notify the candidate within seven business days of a paid request.

# APPEAL PROCEDURE

If a candidate believes the Phase II examination results were adversely affected by extraordinary conditions during the examination, the candidate may appeal such determination by submission of a written petition for reconsideration as detailed in the *Protocol for Processing of Appeals*. The ACVS office must receive the petition within sixty (60) days of releasing results. Contact the ACVS office to receive the most current version of the protocol.

#### **EXAMINATION SECURITY**

#### PROCEDURES IN THE EVENT OF UNETHICAL BEHAVIOR

a. The validity of results awarded to candidates for their performance on the American College of Veterinary Surgeons examination is protected by every means available. The American College of Veterinary Surgeons will not report results, which it has determined, are invalid (i.e., do not represent a reasonable assessment of the

- candidate's knowledge or competence sampled by the examination). The performance of all candidates is monitored and may be analyzed statistically for purposes of detecting invalid results.
- b. If evidence by observation or statistical analysis suggests that one or more candidates' results may be invalid or that exam security could have been compromised because of unethical behavior by one or more candidates prior to, during, or after the examination, the American College of Veterinary Surgeons will withhold the results pending further investigation. The affected candidate(s) will be notified.
  - Examples of unethical behavior affecting the validity of results or that would result in the withholding of results pending further investigation, would include, but not be limited to the following: (i) copying of answers from another candidate; (ii) permitting one's answers to be copied; (iii) unauthorized possession, reproduction, or disclosure of materials, including examination questions or answers from the current or previous years' examinations before, during, or after the examination; (iv) contact with unauthorized sources of information during the examination (i.e. notes, electronic devices, or other people) regardless of the intention; and (v) any other evidence indicating the security of the examination could have been breached.
- c. Notification of unethical behavior will be at the earliest possible time following completion of the examination. The candidate(s) will be advised of the procedure for imposing sanctions and informed that results may be withheld as invalid.
- d. On analysis of all available information in such circumstances, the American College of Veterinary Surgeons will make a determination as to the validity of the results in question and will notify the affected candidate(s). If it is determined that the results in question are invalid, they will not be released. Notification of that determination may be made to legitimately interested third parties.
- e. In such circumstances, the American College of Veterinary Surgeons will make every effort to withhold the results of only those candidates directly implicated in the unethical behavior. In some instances, the evidence of unethical behavior is sufficiently strong to cast doubt on the validity of all results, and this evidence may not enable the American College of Veterinary Surgeons to identify the particular candidates involved therein. In such circumstances, the American College of Veterinary Surgeons reserves the right to withhold the results of candidates not directly implicated in the unethical behavior during the investigation.
- f. Candidates or other persons who are directly implicated in an unethical behavior affecting the validity of the examination results or compromising examination security are subject to additional sanctions, including being barred permanently from all future examinations, termination of participation in an ongoing examination, invalidation of results of the examination, withholding or revoking certification, being prosecuted for violation of copyright laws, or other appropriate action. Candidates or other persons subject to such additional sanctions will be provided with written notice of the charges and an opportunity to respond to such charges in accordance with the procedures set forth in the *Procedure for Imposition of Sanctions on Candidates Accused of Unethical Behavior* section of this information pamphlet.
- g. Candidates or other persons who engage in other forms of unethical behavior, associated with any aspect of the examination, regardless of any impact on an individual's results, are also subject to the foregoing additional sanctions. Examples of such unethical behavior include, among other things: false statements to, or submission of, falsified documents to the American College of Veterinary Surgeons; the use of any falsified American College of Veterinary Surgeons' documents or the submission of such documents to other persons; or the offer of any financial or other benefit to any persons, officer, employee, proctor, or other agent or representative of the American College of Veterinary Surgeons in return for any right, privilege, or benefit which is not usually granted by the American College of Veterinary Surgeons to other similarly situated candidates or persons. Candidates or

other persons subject to such additional sanctions will be provided with written notice of the charges and an opportunity to respond to such charges in accordance with the procedures set forth in the *Procedure for Imposition of Sanctions on Candidates Accused of Unethical Behavior* section of this information pamphlet.

#### PROCEDURE FOR IMPOSITION OF SANCTIONS ON CANDIDATES ACCUSED OF UNETHICAL BEHAVIOR

- a. If the American College of Veterinary Surgeons has reason to believe that a candidate engaged in unethical behavior, the American College of Veterinary Surgeons shall provide written notice to the accused which will include: (i) the suspected unethical activity; (ii) the opportunity to defend against the charges in writing or at a hearing before a Special Committee of the American College of Veterinary Surgeons; and (iii) the sanction or sanctions which the American College of Veterinary Surgeons may impose if the accused fails to defend against the charges or, if after considering the defense, the Special Committee determines that the accused actually engaged in unethical behavior.
- b. Within twenty (20) days after receiving aforementioned notice, the accused shall advise the chief executive officer of the American College of Veterinary Surgeons, in writing, whether he or she wishes to defend against the charges and, if so, whether he or she wishes to make such a defense in writing or at a hearing. If the accused fails to respond, the American College of Veterinary Surgeons may impose on the accused any of the sanctions identified in the Examination Contract.
- c. Within twenty (20) days after receipt of the accused's request for an opportunity to defend against the charges, the chief executive officer of the American College of Veterinary Surgeons shall provide the accused with a written summary of the incriminating evidence, including copies of any relevant documentary evidence. If the accused has requested an opportunity to defend against the charges in writing only, the accused shall file his or her written defense with the American College of Veterinary Surgeons within thirty (30) days after issuance of the chief executive officer's written summary of evidence. The Special Committee of the American College of Veterinary Surgeons shall issue its written decision to the chief executive officer and the accused as soon as possible thereafter. If a hearing has been requested, the American College of Veterinary Surgeons shall schedule the hearing at a mutually convenient time and place before a Special Committee within thirty (30) days after issuance of the American College of Veterinary Surgeons' written summary of evidence, and the Special Committee shall issue its written decision as soon as possible thereafter.
- d. A Special Committee consisting of three (3) Diplomates appointed by the chair of the Board of Regents of the American College of Veterinary Surgeons, who were not involved in the investigation of the allegations against the accused, shall rule on the accused's defense and, if necessary, preside at the hearing. A transcript of the hearing, if any, shall be kept.
- e. The written decision of the Special Committee may be appealed in writing by the accused to the entire Board of Regents of the American College of Veterinary Surgeons within fifteen (15) days of the accused's receipt of such decision. The entire Board of Regents will review all of the evidence considered by the Special Committee, but it will not consider any evidence not previously presented to the Committee. The entire Board of Regents may affirm or reverse the decision of the Special Committee, remand the matter to the Special Committee for further consideration with precise instruction as to the basis of such reconsideration, or modify the sanctions imposed by the Special Committee. No person who served on the Special Committee shall vote or otherwise participate in the Board of Regents' review of the Special Committee's written decision.
- f. The Board of Regents will inform in writing the director of certification and the director of the Examination Committee of the final decision, including the salient reasoning behind the decision, within thirty (30) days of the final decision (after all appeal deadlines have expired or the appeal process has been completed).

g.	All notices or other correspondence directed to the American College of Veterinary Surgeons or the Special Committee should be sent to the office of the American College of Veterinary Surgeons, 19785 Crystal Rock Drive Suite 305, Germantown, MD 20874-4700.		