

American College of Veterinary Sports Medicine and Rehabilitation

Topic Rubric for the 2024 Equine-specific Board-certification Examination

The following table provides a detailed outline of the topics and estimated percentage distribution of material to be covered in the 2024 Equine Species-specific Examination.

Percentage Distribution	EQUINE SPORTS MEDICINE AND REHABILITATION EXAMINATION
21%-25%	1. Foundational Material Addresses the general working knowledge needed for daily equine sports medicine and rehabilitation practice including foundational biomechanical and biological concepts
	• Physical examination, gait analysis, lameness evaluation, and diagnostic analgesia
	• Exercise physiology, energetics and thermoregulation
	• Nociception and pain physiology, pain management, and pharmacology
	• Nutrition and nutraceuticals
	• Farriery
	• Saddle, tack and training equipment
	• Ground surfaces, racing surfaces
22%-27%	2. Neuromusculoskeletal System Addresses common neurologic, muscular and orthopaedic disorders and equine sport-specific injuries in both English and Western disciplines Topics address biomechanics, mechanisms of injury, pathophysiology, principles of tissue healing and repair Includes general surgical indications, post-operative care, and prognosis for return to sport following injury associated with common orthopaedic and neurologic disorders
	• Axial skeletal (head, neck, trunk, pelvis)
	• Thoracic limb
	• Pelvic limb
9%-13%	3. Equine Body System Pathophysiology Addresses the anatomy, physiology, pathophysiology, medical diagnosis and management, and rehabilitation of common cardiac, respiratory, and gastrointestinal disorders Includes general surgical indications, post-operative care, and prognosis for return to sport associated with cardiovascular, respiratory and gastrointestinal disorders in equine athletes in both English and Western disciplines
	• Cardiovascular
	• Respiratory

	<ul style="list-style-type: none"> • Gastrointestinal
	<ul style="list-style-type: none"> • Special senses, vestibular, balance, and coordination
	<ul style="list-style-type: none"> • Endocrine, metabolic and hereditary
20%-24%	4. Diagnostic Imaging Topics specific to diagnostic imaging of the equine sports medicine and rehabilitation patient
	<ul style="list-style-type: none"> • Radiology
	<ul style="list-style-type: none"> • Ultrasonography
	<ul style="list-style-type: none"> • Magnetic resonance imaging
	<ul style="list-style-type: none"> • Nuclear scintigraphy
	<ul style="list-style-type: none"> • Computed tomography
	<ul style="list-style-type: none"> • Endoscopy
	<ul style="list-style-type: none"> • Thermography
13%-17%	5. Physical Rehabilitation Topics specific to rehabilitation and optimized performance of the equine athlete and conservative management of common medical and surgical disorders
	<ul style="list-style-type: none"> • Manual therapies (massage, stretching, mobilization)
	<ul style="list-style-type: none"> • Physical modalities (thermal, mechanical, electromagnetic, photic)
	<ul style="list-style-type: none"> • Therapeutic exercise (flexibility, proprioception, motor control, conditioning, strength)
5%-7%	6. Biological Therapies Topics specific to equine gene therapy, stem cell therapy, platelet-rich plasma (PRP), and interleukin-1 receptor antagonist protein (IRAP), hydrogels, autologous protein solutions
2%-4%	7. Ethics, Regulatory and Legal Issues Address ethical issues, drug regulations and the effects of legal and illegal substances in equine sports medicine and athletic competitions including issues and regulations relevant to the United States Equine Federation (USEF) and the Fédération Equestre Internationale (FEI).

Reading List for the 2024 Equine-specific Board-certification Examination

Please note that this is a guideline for a reading list of textbooks and journals suggested for preparation for the 2024 board-certification examination with the American College of Veterinary Sports Medicine and Rehabilitation.

Disclaimer: Due to the very diverse knowledge base required of sports medicine and rehabilitation, this reading list is suggested, but not all inclusive. Candidates should use the American College of Veterinary Sports Medicine and Rehabilitation examination rubric for identification of examination topics and the percentage distribution of examination questions within in each topic area as the basis for preparation for the respective examinations.

Selected Equine Sports Medicine and Rehabilitation Textbooks

Each of the selected textbooks contains chapters with material pertinent to the field of equine sports medicine and rehabilitation. The applicant will be responsible for material within relevant (or included) chapters related to the basic science and clinical practice of equine sports medicine and rehabilitation. In addition, questions on the species-specific exams may draw from any references on the Core Reading List.

1. Auer, Stick, Kummerle, & Prange. **Equine Surgery**, 5th edition. Saunders Elsevier 2019. ISBN: 9780323484206.
 - a. Section 1 (Chapters: 8)
 - b. Section 3 (Chapter 24)
 - c. Section 6 (Chapters 42-46)
 - d. Section 7 (Chapters 50, 51, 53, 55)
 - e. Section 11 (Chapters 68-72)
 - f. Section 12 (Chapters 73, 79-81, 83-86, 89-102, 105)
2. Back W, Clayton HM. **Equine Locomotion**, 2nd edition. Saunders. 2013. ISBN: 9780702029509.
3. Hinchcliff K, Kaneps A, Geor R. **Equine Sports Medicine and Surgery**. 2nd edition. Saunders, 2014. ISBN 978-0702047718.
4. Kidd, Lu, Frazer. **Atlas of Equine Ultrasonography**. 2nd edition, Wiley, 2014. ISBN: 9780470658130
 - a. Section 1 Musculoskeletal (chapters 1-10)
 - b. Section 2 Internal Medicine (chapters 20 and 21)
5. Murray. **Equine MRI**. Wiley, 2010. ISBN: 9781405183048
 - a. Section A (Chapters 1-4)
 - b. Section B (Chapters 5-10)
6. Ross MW, Dyson SJ. **Diagnosis and Management of Lameness in the Horse**, 2nd edition, Saunders Elsevier, 2010. ISBN: 1416060693

Selected Equine Sports Medicine and Rehabilitation Journals

The veterinary journals listed below contain articles relevant to the field of canine sports medicine and rehabilitation. Within the listed journals, most examination questions will originate from literature published in print or electronically. For the 2024 American College of Veterinary Sports Medicine and Rehabilitation board-certification examination, questions will be created from literature published in print or electronically between **January 1, 2018 and June 30, 2023**.

Exam questions may also originate from information in older journal articles (prior to January 2017) if they are considered essential or foundational to the development and practice of equine sports medicine and rehabilitation. The applicant is responsible for material as it relates to the basic science and clinical practice of equine sports medicine and rehabilitation.

1. American Journal of Veterinary Research
2. Equine Veterinary Journal
3. Frontiers in Veterinary Science
4. Journal of the American Veterinary Medical Association
5. Journal of Equine Rehabilitation
6. Journal of Equine Veterinary Science (limited to rehabilitation and physical therapy articles only)
7. Journal of Veterinary Internal Medicine
8. Veterinary Clinics of North America: Equine Practice
 - a. Rehabilitation of the Equine Athlete, Veterinary Clinics of North America: Equine Practice. Editors Melissa R. King and Elizabeth J. Davidson, April 2016, Volume 32, Issue 1.
9. Veterinary Radiology and Ultrasound
10. Veterinary Surgery