

American College of Veterinary Sports Medicine and Rehabilitation

Topic Rubric for the 2017 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 2017 Equine Species-specific Examination.

Percentage Distribution	EQUINE SPORTS MEDICINE AND REHABILITATION EXAMINATION
21%-25%	<p>1. Foundational Material Addresses the general working knowledge needed for daily equine sports medicine and rehabilitation practice including foundational biomechanical and biological concepts</p> <ul style="list-style-type: none"> • Physical examination, gait analysis, lameness evaluation, and diagnostic analgesia • Exercise physiology, energetics and thermoregulation • Nociception and pain physiology, pain management, and pharmacology • Fundamentals of physical conditioning strategies for specific equine disciplines • Nutrition and nutraceuticals • Farriery • Saddle, tack and training equipment • Ground surfaces, racing surfaces
22%-27%	<p>2. Neuromusculoskeletal System Addresses common neurologic, muscular and orthopaedic disorders and equine sport-specific injuries 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</p> <ul style="list-style-type: none"> • Axial skeletal (head, neck, trunk, pelvis) • Thoracic limb • Pelvic limb
9%-13%	<p>3. Medical Issues of the Equine Athlete 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</p> <ul style="list-style-type: none"> • Cardiovascular • Respiratory • Gastrointestinal

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

Reading List for the 2017 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 2017 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 chapters related to the basic science and clinical practice of equine sports medicine and rehabilitation.

1. Auer JA, Stick JA. Equine Surgery, 4th edition. Elsevier: Saunders, 2012. ISBN: 978-1-4377-0867-7.
2. Back W, Clayton HM. Equine Locomotion, 2nd edition. Saunders. 2013. ISBN: 9780702029509.
3. Butler J, Colles C, Dyson S, Kold S, Poulos P. Clinical Radiology of the Horse. Wiley, 2011, ISBN 144435776X.
4. Clayton HM. The Dynamic Horse: A Biomechanical Guide to Equine Movement and Performance. Sport Horse Publications, 2004. ISBN: 978-0974767000.
5. Hinchcliff K, Kaneps A, Geor R. Equine Sports Medicine and Surgery. 2nd edition. Saunders, 2014. ISBN 978-0702047718.
6. Kidd JA, Lu KG, Frazer ML. Atlas of Equine Ultrasonography. John Wiley & Sons, 2014.
7. McGowan C, Goff L, Stubbs N. Animal Physiotherapy - Assessment, Treatment and Rehabilitation of Animals. Blackwell Publishing, 2007. ISBN: 9781-4051-3185-7.
8. McIlwraith, CW, Frisbie, DD. Kawcak CE, van Weeren PR. Joint Disease in the Horse, 2nd edition, 2016. Elsevier. ISBN 978-1-4557-5969-9.
9. 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 equine sports medicine and rehabilitation. Within the listed journals, the majority of examination questions will originate from literature published within the last five years. For the 2017 American College of Veterinary Sports Medicine and Rehabilitation board-certification examination, questions will be created from literature published between July 2011 and July 2016.

Exam questions may also originate from information in older journal articles (<2011) 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.

- American Journal of Veterinary Research
- Equine Veterinary Journal
- Equine Veterinary Education – *Relevant review articles only*
- Journal of the American Veterinary Medical Association
- Journal of Veterinary Internal Medicine
- Veterinary Journal
- Veterinary Clinics of North America: Equine Practice - *Relevant topics only*
 - 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.
- Veterinary Record
- Veterinary Surgery
- Veterinary Radiology & Ultrasound