



Australian Government

ACMFAR401 Apply knowledge of equine musculoskeletal system, biomechanics and pathology for effective hoof care

Release: 1

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Modification History

Release	Comments
Release 1	This version released with ACM Animal Care and Management Training Package Version 2.0.

Application

This unit of competency describes the skills and knowledge required to identify characteristics and functions of the equine musculoskeletal system and biomechanics with a focus on the distal limb and hoof capsule and associated pathologies related to hoof care.

The unit applies to individuals who require specialised knowledge to manage equine hoof care and communicate information to others.

Workplace health and safety and animal welfare legislation relevant to interacting with horses applies to workers in this industry. Requirements vary between industry sectors and state/territory jurisdictions. Users are advised to check with the relevant authority for specific requirements.

No licensing or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Farriery (FAR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify main structural characteristics of the equine musculoskeletal system	1.1 Identify and explain, using accurate anatomical terminology, the main musculoskeletal features and planes of the equine body 1.2 Outline the basic biomechanics of the equine musculoskeletal

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<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	system in relation to body stability, movement, power and stamina 1.3 Relate features of conformation to various equine disciplines and work activities 1.4 Identify and explain the function of features of the equine fore and hind limbs
2. Determine characteristics of the equine distal limb	2.1 Identify features and relationships between bones and joints, and soft tissues, ligaments and tendons of the distal limb 2.2 Explain changes to bone and soft tissues of the distal limb due to age, exercise, ailments and injury 2.3 Determine significance of the distal limb to horse movement and welfare
3. Relate hoof structure and conditions to equine health and welfare	3.1 Explain how the hoof capsule integrates with the internal hoof structures 3.2 Identify relationships between the hoof and the digit bones and the digit bones with the upper limbs and body 3.3 Investigate relationships between diet and nutrition, age, environment and movement on hoof pathologies 3.4 Investigate the relationship between equine conformation and movement on hoof pathologies
4. Recognise features of equine lameness and related pathologies	4.1 Investigate features, symptoms and causes of equine lameness and related pathologies 4.2 Observe equine stance and movement in different gaits to assess lameness and impact of different forces on the limbs and hoof capsule 4.3 Examine equine using manipulative and palpation techniques to feel for heat, swelling and sensitivity to pressure indicating pain 4.4 Review radiographs or other medical imaging in consultation with veterinarians to supplement knowledge of equine condition or pathology
5. Review common strategies used to address a range of equine pathologies	5.1 Investigate possible preventions, interventions and strategies to address common symptoms of equine lameness and pathologies related to the distal limb 5.2 Identify common conditions and pathologies to be referred to a registered veterinarian 5.3 Communicate information about equine conditions and

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	pathologies clearly to veterinarians and clients using accurate terminology and concepts

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Critically analyse complex anatomical diagrams and texts relevant to equine musculoskeletal system, distal limb and hoof capsule from a variety of sources, and consolidate information
Interact with others	Liaise collaboratively with veterinarians, colleagues or other equine professionals to discuss issues, veterinary diagnoses and potential foot care plans
Get the work done	Use problem-solving techniques to analyse equine movement and musculoskeletal features to identify pathologies and determine foot care needs

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ACMFAR401 Apply knowledge of equine musculoskeletal system, biomechanics and pathology for effective hoof care	Not applicable	New unit	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b75f4b23-54c9-4cc9-a5db-d3502d154103>