



Australian Government

ACMEQU403 Relate musculoskeletal structure to horse movement

Release: 1

ACMEQU403 Relate musculoskeletal structure to horse movement

Modification History

Release	Comments
Release 1	This version released with ACM Animal Care and Management Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to identify equine musculoskeletal structural characteristics and relate their impact to horse movement.

The unit applies to individuals who require highly specialised knowledge for their work in the equine industry and communicate information to others.

No licensing or certification requirements apply to this unit at the time of publication, except for the racing industry, where requirements vary between states and territories. Users working in the racing industry are advised to contact the relevant Principal Racing Authority for advice on current requirements.

Work 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.

NOTE: The terms ‘occupational health and safety’ (OHS) and ‘work health and safety’ (WHS) generally have the same meaning in the workplace. In jurisdictions where the national model WHS legislation has not been implemented, RTOs must contextualise the unit of competency by referring to current OHS legislative requirements.

Pre-requisite Unit

Nil

Unit Sector

Equine (EQU)

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. Determine structural characteristics of the equine musculoskeletal system	1.1 Interpret terminology describing the anatomical and physiological features and planes of the body 1.2 Determine the operation of the musculoskeletal system in relation to body stability, movement, power and stamina 1.3 Identify the structure and types of bones and joints, and relate them to their purpose 1.4 Determine the structure and types of soft tissues and the relationship of ligaments and tendons to the musculoskeletal system
2. Locate equine muscles and supporting tissues related to equine locomotion, power and stamina and determine their function	2.1 Locate deep and superficial muscles of significance to power and locomotion 2.2 Define muscle actions, origin and insertion points 2.3 Identify tendons and ligaments of significance to power and locomotion
3. Define changes in the equine musculoskeletal system due to growth and performance	3.1 Determine changes to bone due to age, exercise, ailments and injury 3.2 Determine changes to soft tissues as a result of growth, exercise, ailments and injury 3.3 Identify impact of overtraining and injury on the musculoskeletal system 3.4 Identify changes to hooves and feet that can occur as a result of growth, exercise, ailments and injury 3.5 Communicate information to others using anatomical, physiological and industry terminology

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 text relevant to the musculoskeletal system of horses from a variety of sources, and consolidate information
Interact with others	Collaborate with others, sharing information clearly and precisely to convey knowledge of horse musculoskeletal features and movement
Get the work done	Use problem-solving techniques to analyse horse movement and musculoskeletal features and determine possible causes of ailments and injuries

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ACMEQU403 Relate musculoskeletal structure to horse movement	ACMEQU403A Relate musculoskeletal structure to horse movement	Updated to meet Standards for Training Packages	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>

Assessment Requirements for ACMEQU403 Relate musculoskeletal structure to horse movement

Modification History

Release	Comments
Release 1	This version released with ACM Animal Care and Management Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual related musculoskeletal features and movement of at least three horses by:

- explaining musculoskeletal structures and features to others using anatomical, physiological and industry terminology accurately
- analysing horse movement and determining possible causes of ailments and injuries relating to musculoskeletal features
- trotting out and handling horses to determine action and flaws.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- principles of horse movement and musculoskeletal structures:
 - anatomical and physiological terminology used to describe features, actions, location and orientation of the musculoskeletal system
- changes in equine anatomical structure that:
 - have occurred during the evolution of the horse
 - can occur due to age, growth, performance, ailments and injury
- conformational characteristics that may impact on musculoskeletal structure stability
- demands of modern competition and working horses that may impact on the musculoskeletal system
- hoof and foot anatomical features and the impact of growth, exercise, ailments and injuries on structures
- pathology and symptomology of common horse ailments and injuries related to the musculoskeletal system of the performance horse
- structure, function, actions, names and location of muscles, bones, joints, ligaments and tendons of a horse that are significant to horse performance

- applicable regulations, codes of practice and workplace procedures for handling horses to determine movement and injuries, including:
 - work health and safety and safe work practices
 - animal welfare principles, practices and ethics.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - various horses to examine and/or observe movement
 - simulations (models, videos or DVDs) to supplement information not available to directly observe or examine on horses
 - access to information about horse musculoskeletal structures, principles of horse movement and the impact of ailments and injuries on horse musculoskeletal structures
- relationships:
 - various people (carers, owners and/or health professionals) for communicating information.

Training and assessment strategies must show evidence of the use of guidance provided in the *Companion Volume: User Guide: Safety in Equine Training*.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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