



Australian Government

ACMEQU505 Manage fitness in horses

Release: 1

ACMEQU505 Manage fitness in horses

Modification History

Release	Comments
Release 1	This version released with ACM Animal Care and Management Training Package Version 5.0.

Application

This unit of competency covers the knowledge and skills required to assess options, design strategies and manage fitness and conditioning programs for horses. It includes monitoring horse responses to conditioning and fitness schedules, responding to problems, and managing spelling and return-to-work periods.

This unit applies to individuals who have responsibility for managing horse fitness, conditioning and exercise programs for a range of purposes. They have extensive knowledge of horses, analyse information, solve routine and at times complex problems, and convey information and skills to others. They may have responsibility for highly valuable animals.

Commonwealth and state/territory health and safety and animal welfare legislation, regulations and codes of practice relevant to interacting with horses apply to workers in this industry. Requirements vary between industry sectors and jurisdictions.

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

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. Assess physiological and structural adaptations of horse	1.1 Identify anatomical and physiological effect of conditioning program on adaptations in major body systems of horses

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
musculoskeletal system to conditioning	1.2 Assess structural differences in physical appearance and muscling between conditioned and unconditioned horses 1.3 Determine strategies and techniques to use for conditioning horses
2. Assess changes to the cardiovascular and respiratory systems in response to conditioning	2.1 Arrange for blood tests to be taken and analysed for indicators of fitness and response to training, in consultation with veterinary experts 2.2 Use heart rate monitors or stethoscopes, using safe, low stress horse handling techniques, to evaluate horse fitness and response to training 2.3 Monitor and record heart rate pre-exercise and post-exercise to determine impact of exercise and competition and to track changes in fitness 2.4 Measure and record respiratory rates following exercise to evaluate impact of exercise and track changes in fitness 2.5 Investigate training and conditioning techniques to improve lung function and gas exchange efficiency, and apply where appropriate
3. Monitor and evaluate physiological outcomes of conditioning and exercise programs	3.1 Determine and document conditioning and fitness goals 3.2 Monitor and adapt program on a regular basis to ensure short-term and long-term goals are achieved 3.3 Develop and implement a training and conditioning program to achieve required physiological adaptations 3.4 Identify and manage exercise-related illness and injury
4. Evaluate contribution of feed sources on energy production in exercising horses	4.1 Evaluate nutrient sources for their potential contribution to horse energy needs relative to exercise program, intensity and duration 4.2 Evaluate nutritional supplements suitable for inclusion in diets of horses undergoing a fitness program
5. Manage fatigue in horses	5.1 Identify causes of fatigue in exercising horses and develop measures to prevent or manage fatigue during training and competition 5.2 Identify signs and effects of fatigue, and develop measures to minimise harm to the horse
6. Monitor and manage thermoregulation efficiency in exercising horses	6.1 Develop and implement strategies to prevent over-heating during training and competition schedule 6.2 Identify signs of over-heating in horses and take appropriate and rapid measures to provide relief

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	6.3 Ensure that horses are kept appropriately hydrated during exercise, travel and competition 6.4 Identify signs of dehydration in horses and take appropriate and rapid measures to provide relief
7. Manage spelling and resumption of work in horses	7.1 Incorporate planned periods of rest into design of training and competition schedules 7.2 Arrange rest or spelling periods to minimise loss of fitness 7.3 Develop and implement strategies to manage transition from work to spelling 7.4 Monitor health and welfare of horses being spelled

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	Extract and interpret technical information in veterinary reports and test results
Writing	Produce structured horse conditioning program and specifications based on clearly articulated goals for use by intended audience in print-based and/or digital formats
Numeracy	- Interpret data and trends, and analyse against goals or benchmarks - Interpret, calculate and adjust feed ration formulations and quantities - Measure and estimate speed, distance and temperature with reasonable accuracy

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

ACMEQU505 Manage fitness in horses	ACMPHR505 Manage fitness in performance horses	Title changed Unit sector changed to EQU Minor updates to Performance Criteria for clarity Foundation Skills table and Assessment Requirements updated	Equivalent
---------------------------------------	---	---	------------

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 ACMEQU505 Manage fitness in horses

Modification History

Release	Comments
Release 1	This version released with ACM Animal Care and Management Training Package Version 5.0.

Performance Evidence

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

There must be evidence that the individual has:

- developed and adapted individual conditioning programs for at least two horses with different fitness and exercise goals and requirements
- managed the program for each horse, including:
 - measured, recorded and evaluated data, vital signs and other indicators of health and welfare
 - monitored and managed diet and nutrition components of the program
 - monitored and managed fatigue, injuries and thermoregulation efficiency
 - planned and managed spelling and rest periods.

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:

- key features of anatomy and physiology of horse body systems, including:
 - respiratory
 - cardiovascular
 - musculoskeletal
 - digestive
- key features of exercise physiology, including adaptations of horse body systems to exercise, including:
 - horse body condition scoring systems
 - basic principles of chemistry relating to exercise and performance fitness
 - basic principles of biology relating to exercise and performance fitness
 - normal and abnormal blood test parameters relevant to exercise

- features of thermoregulation
- key features of a conditioning or fitness program, including:
 - information about individual horse
 - program goals (short and longer term) and expected outcomes
 - strategies or methodologies, including contingency strategies
 - schedule, milestones, benchmarks
- equipment relevant for implementing a conditioning program, including:
 - horse gear and protective equipment
 - heart rate monitors
 - electronic tracking and recording devices, including GPS, video and camera functionality
 - exercise equipment, including treadmills, video analysis
- horse conditioning techniques and methods
- common horse health problems and injuries related to exercise
- risk factors for the development of exercise-related injuries and disease
- feed, supplements and nutraceuticals relevant to maintaining health and welfare of exercising horses
- key requirements of work, health and safety regulations and guidelines relating to:
 - risk assessment, control and review
 - safe horse handling techniques
 - personal protective equipment (PPE)
- key requirements of animal welfare standards, policies and procedures relevant to the safe, humane and ethical care of horses, including an overview of the concept of social licence to operate.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - an equine workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - various live horses as specified in the performance evidence, assessed as suitable for the experience and skill of the individual
 - appropriate gear for horse and conditioning activities
 - PPE correctly fitted and applicable to activity for handler
 - health and exercise monitoring and measuring equipment
- specifications:
 - relevant workplace policies and procedures, and animal welfare legislation and codes of practice.

The *Companion Volume: User Guide: Safety in Equine Training* provides advice and sample templates to assist assessors with the risk assessments that should be undertaken to help ensure the safety of all involved in the assessment.

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>