

Modification history

Release	Comments
Release 2	This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 7.0.
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 1.0.

AHCAIS401	Supervise artificial breeding and embryo transfer programs
Application	<p>This unit of competency describes the skills and knowledge required to determine breeding method, and supervise, monitor and maintain artificial breeding and embryo transfer (ET) programs.</p> <p>The unit applies to individuals who apply specialist skills and knowledge to supervise artificial breeding and embryo transfer programs. This includes applying and communicating non-routine technical solutions to predictable and unpredictable problems.</p> <p>All work must be carried out to comply with workplace procedures, health and safety in the workplace requirements, animal welfare legislative, regulatory and codes of practice requirements, and sustainability and biosecurity practices.</p> <p>No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.</p>
Prerequisite Unit	Nil
Unit Sector	Artificial Insemination (AIS)

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 breeding method	1.1 Review options for artificial breeding to determine most suitable and affordable method according to breeding objectives 1.2 Select and match artificial breeding option to resources and breeding objectives 1.3 Identify, source and arrange breeding program resources 1.4 Prepare program schedules according to available resources 1.5 Source personal protective equipment for staff and self according to workplace health and safety procedures
2. Implement breeding method	2.1 Check the disease status of donor and recipient animals according to biosecurity requirements 2.2 Obtain genetic material from appropriate and reliable source 2.3 Receive, check and store genetic material according to workplace procedures 2.4 Handle animals according to workplace animal welfare practices 2.5 Ensure females are inseminated at the optimal stage of the oestrus cycle where artificial insemination is the selected option 2.6 Check to ensure intended recipients are prepared and correctly scheduled where ET is the selected option 2.7 Provide hormone injections to intended recipients or donors at appropriate stages of transfer programs where ET is the selected option 2.8 Conduct embryo transfers according to codes of practice and industry standards where ET is the selected option
3. Monitor and maintain program	3.1 Monitor the need for return to service of intended recipient 3.2 Monitor environment and health of livestock in the breeding program 3.3 Review adjustments in genetic material transfer practices to enhance success of future programs 3.4 Document and maintain data on genetic material transfer programs

Foundation Skills	
<i>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.</i>	
Skill	Description
Reading	<ul style="list-style-type: none"> Identify and interpret textual information from a range of sources to identify relevant and key information about artificial breeding and embryo transfer programs
Writing	<ul style="list-style-type: none"> Use clear language, accurate industry terminology and logical structure to prepare genetic material transfer program documents

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
AHCAIS401 Supervise artificial breeding and embryo transfer programs Release 2	AHCAIS401 Supervise artificial breeding and embryo transfer programs Release 1	Minor changes to application minor changes to performance criteria foundation skills added assessment requirements updated	Equivalent

Links	Companion Volumes, including Implementation Guides, are available at VETNet: https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72
--------------	--

TITLE	Assessment requirements for AHCAIS401 Supervise artificial breeding and embryo transfer programs
--------------	---

Performance Evidence
<p>An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.</p> <p>There must be evidence that the individual has supervised an artificial breeding or an embryo transfer program on at least one occasion, and has:</p> <ul style="list-style-type: none"> • determined breeding method • implemented breeding method • monitored and maintained program • applied relevant workplace health and safety and environmental and biosecurity legislation, regulations, and workplace procedures • applied workplace animal welfare practices.

Knowledge Evidence
<p>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:</p> <ul style="list-style-type: none"> • workplace requirements applicable to health and safety in the workplace for supervising artificial breeding and embryo transfer programs, including appropriate use of personal protective equipment (PPE) • environment and biosecurity legislation and regulations and workplace practices relevant to supervising artificial breeding and embryo transfer programs • principles and practices of artificial breeding and embryo transfer programs, including: <ul style="list-style-type: none"> • animal welfare industry standards, legislation and codes of practice and procedures relevant to supervising artificial breeding and embryo transfer programs • codes of practice, industry standards and procedures for artificial insemination and embryo transfer • resources requirements, types and characteristics of artificial breeding methods and programs • advantages, disadvantages and cost-benefit analysis of artificial breeding programs for the livestock workplace • requirements, methods and procedures for sourcing, acquiring, transporting and storing genetic material • anatomy and physiology of female livestock • reproductive physiology, reproductive behaviour and pregnancy development of female livestock • procedures for artificial insemination • procedures for embryo transfer • causes, signs, treatment and management of reproductive diseases and complications in female livestock • methods and procedures for improving the success of artificial breeding programs and their impacts on herd performance • documentation and record requirements.

Assessment Conditions
<p>Assessment of the skills in this unit of competency must take place under the following conditions:</p> <ul style="list-style-type: none"> • physical conditions: <ul style="list-style-type: none"> • a workplace setting or an environment that accurately represents workplace conditions • resources, equipment and materials: <ul style="list-style-type: none"> • work instructions and workplace procedures applicable to supervising artificial breeding and embryo transfer programs • live animals • materials, tools and equipment applicable to supervising artificial breeding and embryo transfer programs • PPE applicable to supervising artificial breeding and embryo transfer programs • specifications: <ul style="list-style-type: none"> • workplace requirements applicable to health and safety in the workplace for supervising artificial breeding and embryo transfer programs

Assessment Conditions	
<ul style="list-style-type: none">• environment and biosecurity legislation and regulations and workplace practices applicable to supervising artificial breeding and embryo transfer programs• industry standards, legislation and codes of practice and procedures for animal welfare applicable to supervising artificial breeding and embryo transfer programs• timeframes:<ul style="list-style-type: none">• according to job requirements. <p>Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.</p>	
Links	Companion Volumes, including Implementation Guides, are available at VETNet: https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72