

APPLY KNOWLEDGE OF ANIMAL GROWTH AND DEVELOPMENT

UNIT CODE: 0841 541 30A

TVET CDACC UNIT CODE: HE/OS/AHP/CC/06/6/MA

UNIT DESCRIPTION

This unit covers the competencies required by an animal health technologist to apply knowledge of animal growth and development. It involves applying general concepts of growth and development, manipulation to growth and development, compensatory growth, maturity and body composition in animal production.

ELEMENTS AND PERFORMANCE CRITERIA

ELEMENT These describe the key outcomes which make up workplace function	PERFORMANCE CRITERIA These are assessable statements, which specify the required level of performance for each of the elements. <i>Bold and italicized terms are elaborated in the Range</i>
1. Apply general concepts of growth and development.	1.1. Importance of growth and development in livestock production is identified. 1.2. Developmental stages of growth and development knowledge is applied as per work requirement 1.3. Factors that affect postnatal growth and development are managed as per work requirement
2. Apply knowledge of manipulation to growth and development in animal production	2.1 Methods of <i>genetic manipulation</i> to growth and development is applied as per work requirement 2.2 <i>Growth promoters</i> in manipulation to growth and development are applied as per work requirement Importance of manipulation of growth and development in animal production are identified
3. Apply knowledge of compensatory growth in animal production.	3.1. Knowledge of compensatory growth in animal production is applied as per work requirement 3.2. Economic value of compensatory growth in animal production is determined as per work

	<p>requirement</p> <p>3.3. Factors that affect compensatory growth are managed as per work requirement</p>
<p>4. Apply knowledge of maturity and body composition in animal production.</p>	<p>4.1 Types of maturity knowledge is applied as per work requirement</p> <p>4.2 Effects of age on fat, bone and muscle development are managed as per work requirement</p> <p>4.3 Effects of age on meat quality are managed as per work requirement</p>

RANGE

This section provides work environment and conditions to which the performance criteria apply. It allows for different work environment and situations that will affect performance.

Variable	Range
<p>1. Genetic manipulation to growth includes but not limited to:</p>	<ul style="list-style-type: none"> ● Transgenic techniques ● Screening of embryos ● Embryo splitting ● cloning
<p>2. Growth promoters may include but not limited to:</p>	<ul style="list-style-type: none"> ● Hormones ● Gut-active promoters ● Probiotics

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit of competency.

Required Skills

The individual needs to demonstrate the following skills:

- Analytical skills
- Numeracy skills
- Data handling skills

- Communication skills
- Animal handling skills

Required Knowledge

The individual needs to demonstrate knowledge of:

- Digital literacy
- Anatomy
- Physiology
- Genetics

EVIDENCE GUIDE

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

Critical aspects of Competency	<p>Assessment requires evidence that the candidate:</p> <p>1.1 Applied developmental stages of growth and development knowledge as per work requirements</p> <p>1.2 Applied knowledge of factors that affect postnatal growth and development as per work requirement</p> <p>1.3 Applied methods of genetic manipulation to growth and development as per work requirement</p> <p>1.3 Applied growth promoters in manipulation to growth and development as per work requirement</p> <p>1.4 Applied knowledge of compensatory growth in animal production as per work requirement</p> <p>1.5 Managed factors that affect compensatory growth as per work requirement</p>
6. Resource Implications	<p>The following resources must be provided:</p> <p>2.1 Appropriately simulated environment where assessment can take place</p> <p>2.2 Access to relevant work environment</p> <p>2.3 Resources relevant to the proposed activities or tasks</p>

7. Methods of Assessment	Competency in this unit may be assessed through: 2.1 Direct Observation/Demonstration with Oral Questioning 2.2 Written Examination
8. Context of Assessment	Competency may be assessed in a: Workplace or simulated workplace
9. Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.