

ANIMAL ANATOMY AND PHYSIOLOGY

UNIT CODE: 0841 441 04A

TVET CDACC UNIT CODE: HE/CU/AHP/CC/01/5/MA

Relationship to Occupational Standards

This unit addresses the unit of competency: Apply knowledge of animal anatomy and physiology.

Unit Duration: 90 hours

Unit Description

This unit specifies the competencies required by an animal health and production technician to apply knowledge of animal anatomy and physiology. It involves applying knowledge of anatomical and physiological principles, apply knowledge of animal's body system, apply knowledge of domestic fowl anatomy and physiology and apply knowledge of environmental physiology.

Summary of Learning Outcomes

By the end of this unit, the learner should be able to:

S/No	Learning Outcomes	Duration (Hours)
1.	Apply knowledge of anatomical and physiological principles	20
2.	Apply knowledge of animal's body system	40
3.	Apply knowledge of domestic fowl anatomy and physiology	20
4.	Apply knowledge of environmental physiology	10
Total		90

Learning Outcomes, Content and Suggested Assessment Methods:

Learning Outcome	Content	Suggested Assessment Methods
1. Apply knowledge of anatomical and physiological principles	1.1 Introduction to anatomy & physiology 1.1.1 Definitions ✓ Anatomy ✓ Physiology ✓ Gross anatomy ✓ Microscopic anatomy 1.2 Animal anatomical principles 1.3 Animal cell physiology 1.4 Branches of anatomy 1.4.1 Gross anatomy 1.4.2 Embryology 1.4.3 Comparative anatomy 1.5 Mammalian cell	<ul style="list-style-type: none"> ● Practical ● Project ● Written tests ● Third party report ● Portfolio of evidence ● Oral questions
2. Apply knowledge of animal's body systems	2.1 Animal tissue 2.1.1 Epithelial 2.1.2 Connective 2.1.3 Nervous 2.1.4 Muscle 2.2 Animal organs 2.2.1 Brain 2.2.2 Heart 2.2.3 Lungs 2.2.4 Kidneys 2.2.5 Liver 2.3 Animal organs system 2.3.1 Digestive 2.3.2 Skeletal 2.3.3 Muscular 2.3.4 Integument	<ul style="list-style-type: none"> ● Practical ● Project ● Written tests ● Third party report ● Portfolio of evidence ● Oral questions

	2.3.5 Reproductive 2.3.6 Respiratory 2.3.7 Circulatory 2.3.8 Lymphatic 2.3.9 Endocrine 2.3.10 Nervous 2.3.11 Excretory	
3. Apply knowledge of domestic fowl anatomy and physiology	3.1 Domestic fowl digestive system 3.2 Domestic fowl reproductive system 3.3 Domestic fowl respiratory system	<ul style="list-style-type: none"> ● Practical ● Project ● Written tests ● Third party report ● Portfolio of evidence ● Oral questions
4. Apply knowledge of environmental physiology	4.1 Environmental effects on animal physiology 4.2 Animal adaptive responses to environment 4.3 Animal behavior to the environment	<ul style="list-style-type: none"> ● Practical ● Project ● Written tests ● Third party report ● Portfolio of evidence ● Oral questions

Suggested Methods of Delivery

- Practical
- Projects
- Demonstrations
- Group discussion
- Direct instruction

Training resources for 25 trainees

S/No.	Category/Item	Description/Spe	Quantity	Recommend
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		ification		d Ratio (Item: Trainee)
A	Learning materials			
1	Projector	EPSOM	1	1:25
2	Whiteboard/Smartboard	2.5 By 1.5.M	1	1:25
3	Desktop/computer			
4	Charts of various skeletons		5	1:5
B	Learning Facilities & Infrastructure			
1	Lecture/Theory room		1	1:25
2	Anatomy Laboratory		1	1:25
3	Functional farm	As by KVB guidelines	-	-
4	Library	Equipped with animal anatomy and physiology books and E-Library section	1	1:25
C	Consumable Materials			
1.	Charts of various animal skeletons		1	1:25
D	Tools and Equipment			