

## BOTANY AND ZOOLOGY

**UNIT CODE: 0511 441 21A**

**TVET CDACC UNIT CODE: HE/CU/AHP/CC/05/5/MA**

### **Relationship to Occupational Standards**

This unit addresses the Unit of Competency: Apply knowledge of botany and zoology.

**UNIT DURATION: 60 Hours**

### **Unit Description**

This unit specifies the competencies required by an animal health and production technician to apply knowledge of botany and zoology in animal health and production. It involves applying knowledge of botany and zoology, plant morphology and plant and animal classification.

### **Summary of Learning Outcomes**

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

<b>S/No</b>	<b>Learning Outcomes</b>	<b>Duration (Hours)</b>
1.	Apply knowledge of botany and zoology	20
2.	Apply knowledge of plant morphology	20
3.	Apply knowledge of plant and animal classification in animal production	20
<b>Total</b>		<b>60</b>

### **Learning Outcomes, Content and Suggested Assessment Methods**

<b>Learning Outcomes</b>	<b>Content</b>	<b>Suggested Assessment Methods</b>
1. Apply knowledge botany and zoology	1.1 Basic concept of botany and zoology 1.2 Stages of cell division in botany 1.3 Stages of cell division in animal cell 1.4 Plant organization	<ul style="list-style-type: none"><li>● Practical</li><li>● Project</li><li>● Written tests</li><li>● Third party report</li><li>● Portfolio of evidence</li></ul>

		<ul style="list-style-type: none"> <li>● Oral questions</li> </ul>
2. Apply knowledge of plant morphology	2.1 Plant morphology <ul style="list-style-type: none"> <li>2.1.1 Leaf structure</li> <li>2.1.2 Flower structure</li> </ul> 2.2 Fruits and seeds formation	<ul style="list-style-type: none"> <li>● Practical</li> <li>● Project</li> <li>● Written tests</li> <li>● Third party report</li> <li>● Portfolio of evidence</li> <li>● Oral questions</li> </ul>
3. Apply knowledge of plant and animal classification in animal production	3.1 Plant and animal classification 3.2 Hierarchical groupings of animals and plants 3.3 Phyla of veterinary importance <ul style="list-style-type: none"> <li>3.3.1 Chordata</li> <li>3.3.2 Nematoda</li> <li>3.3.3 Platyhelminthes</li> <li>3.3.4 Arthropoda</li> <li>3.3.5 Mollusca</li> </ul>	<ul style="list-style-type: none"> <li>● Practical</li> <li>● Project</li> <li>● Written tests</li> <li>● Third party report</li> <li>● Portfolio of evidence</li> <li>● Oral questions</li> </ul>

### Suggested Methods of Delivery

- Practical
- Projects
- Demonstrations
- Group discussion
- Direct instructions

### Recommended Resources for 25 Trainees

S/No.	Category/Item	Description/Specification	Quantity	Recommended Ratio (Item: Trainee)
<b>A</b>	<b>Learning materials</b>			
	Projector	EPSOM	1	1:25
	Whiteboard/Smartboard	2.5 By 1.5.M	1	1:25
	Desktop/computer		1	1:25
<b>B</b>	<b>Learning Facilities &amp; Infrastructure</b>			
	Lecture/Theory room	With at least	1	1:25

		25 seats		
	Library	Equipped with botany and zoology books and E-section	1	1:25
<b>C</b>	<b>Consumable Materials</b>			
<b>D</b>	<b>Tools and Equipment</b>			