## ACMGEN4X01 Develop knowledge of animal anatomy and physiology for animal care work

#### Unit outcomes

This unit of competency describes the knowledge of animal anatomy and physiology including the structures, functions and interrelationships of body systems, required to support animal health and husbandry practices, across a broad range of animal care contexts.

The unit is predominantly knowledge-based, providing a **theoretical foundation** for units related to animal care, handling, husbandry, health and welfare. It incorporates knowledge of animal classifications, animal body systems and physiological functions, external anatomical features and comparative anatomy of animals.

**Graduates of the unit will apply understanding of anatomy and physiology** to identify normal and abnormal findings during observation, handling, or care routines.

**Licensing, legislative, regulatory requirements**

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

#### Knowledge

* anatomical features of animals including major body regions, planes, cavities, organs and tissues
* basic comparative anatomy including similarities and differences in anatomical structures between animal species
* structure, location and the basic interrelationships of major body systems, including skeletal, muscular, nervous, cardiovascular, respiratory, digestive, urinary, reproductive, integumentary, lymphatic and endocrine systems
* functions and physiological processes that maintain homeostasis within and between body systems
* common signs and indicators of dysfunction or disease, and how these relate to changes in anatomy or physiology
* causes and effects of common diseases and disorders, including how pathogens, nutrition, environment or injury disrupt body systems.
* terminology, reference materials and industry conventions used to describe anatomical structures, physiological processes, and disease conditions.

#### Skills

* classify animals and identify differences between animal groups
* use correct terminology and demonstrate understanding of the external anatomical structures of mammals, birds and reptiles and the physiological functions of animal body systems

* **distinguish, analyse and interpret anatomical differences and similarities** between species and how these relate to function
* recognise and interpret deviations from normal anatomy or physiology that may indicate disease or dysfunction

#### Application of knowledge & skills

This unit applies to individuals working in a wide range of animal care environments, enabling them to apply integrated knowledge of animal anatomy and physiology to classify animals and identify normal and abnormal body structures and physiological functions in a range of animal species.

Applying this knowledge within their defined scope of practice and responsibility, individuals will be accountable for consistent and accurate application of anatomical and physiological knowledge in animal care work and for applying judgement in recognising variations from normal anatomical and physiological function requiring reporting or responding appropriately within their level of responsibility.

#### Pre-requisite unit

Nil

#### Unit sector

GEN

#### Foundation skills

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| --- | --- | --- | --- | --- |
| **Learning** | **Reading** | **Writing** | **Oral communication** | **Numeracy** |
| 4 | 4 | 3 | 3 | 2 |

**Assessment Requirements**

**Performance evidence**

Individuals must apply the knowledge and skills specified in the unit of competency to:

* use industry terminology to demonstrate knowledge of the external anatomical features, body systems and physiological functions of organs, of at least:

three different mammals

one bird, and

one reptile

* compare the anatomy and body systems of three different animal groups including key structural and functional differences
* relate at least four observed signs of health, dysfunction or disease to anatomical and physiological processes.

**Knowledge evidence**

To demonstrate the application of the knowledge specified in this unit of competency, individuals must have knowledge of:

* terminology relevant to classification of animals, animal anatomy and physiology
* characteristics and anatomical features of animal groups

mammals

birds

reptiles

amphibians

fish

invertebrates

* structure, function and interconnectedness of body systems, including:

muscular system

skeletal system

digestive system

cardiovascular/circulatory system

respiratory system

excretory (urinary) system

nervous system

reproductive system

endocrine system

integumentary system

lymphatic/immune system

* structure and function of comparative body systems
* characteristics of herbivores and carnivores
* characteristics of monotremes and marsupials
* normal physical parameters and observable signs of animal health
* common causes of disease or dysfunction and how they disrupt anatomy or physiology

**Assessment conditions**

Assessment must ensure access to:

* real animals, anatomical models and/or graphics of animals
* access to animal anatomy and physiology reference material.

Assessors must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

#### Unit mapping information

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| --- | --- | --- | --- |
| **Code and title current version** | **Code and title previous version** | **Equivalence status** | **Comments** |
| ACMGEN4X01 Develop knowledge of animal anatomy and physiology for animal care work | ACMGEN314 Identify animal anatomy and physiology for animal care work | Not equivalent | Title change and change to Application wording.  PCs and elements replaced by knowledge, skills and application as per ASK template.  Knowledge of common causes of diseases or dysfunction and how they disrupt anatomy or physiology. Corresponding requirement to apply knowledge added to PE resulting in PE change from simply ‘identifying’ or classifying animals to ‘demonstrating knowledge’ of and comparing anatomy and physiologies of different species (without specifying how the knowledge is required to be demonstrated – through explanation, description etc). |

### Overview information

#### Modification History

|  |  |
| --- | --- |
| **Release** | **Comments** |
| 1 | This unit of competency was first released in ACM Animal Care and Management Training Package Release 7.0. |

**Mandatory workplace requirements:**

Assessment of performance evidence may be in a workplace setting or an environment that accurately represents a real workplace.