INTRODUCTION MODULE SUMMARY

# Contents



# Self-Study

- ✓ What is Anatomy
- ✓ Anatomical Terms
- ✓ Body Cavities

**1. Compare and contrast the roles of anatomy and physiology in describing clinically normal or clinically abnormal domestic mammals**

Understanding the function of an organ requires knowledge of its structure. The function conversely reflects the structural constraint on the evolution of organs. In describing abnormality it is clear that knowledge of normal structure is essential as is normal function to recognize abnormalities.

**2. Synthesize schemes that identify the major (or gross) physiological functions of domestic mammals.**

**3. Analyse the differences between the following anatomical subdisciplines:**

→ *Gross:* Use the naked eye and dissecting instruments to study it
→ *Histological:* Using a microscope, the study of cell arrangement into tissues and organs (histos = tissue)
→ *Systemic:* Anatomy by division into organ systems (commonly recognized as 14)
→ *Regional:* The interrelationships of the different structures of the different body systems by area in the body
→ *Comparative:* observing the differences and similarities between the species
→ *Developmental:* The consideration of anatomical changes over time
→ *Surface:* Looks at the identifiable features on the surface of an animal (seen or felt in clinical examination)
→ *Surgical:* applied to a surgical setting where visualisation of structures in more limited
→ *Radiographic:* relationship of anatomy to all diagnostic imaging techniques

*The 14 systems*

→ The common integument (skin and its derivatives – the study of this body system, particularly from a medical viewpoint, is dermatology)
→ the skeletal system (the study of which is osteology),
→ the muscular system (the study of which is myology),
→ the joints (the study of which is arthrology) [the skeleton, muscles and joints are clearly interrelated functionally, and are often combined into a single system, the musculoskeletal system],
→ the digestive system (sometimes referred to as the gastrointestinal system, although that term technically only refers to the stomach and intestines, which constitute a part of the digestive system),
→ the respiratory system, the heart and blood vascular system (aka cardiovascular system),

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