

Liverpool John Moores University

Title: ANATOMY AND PHYSIOLOGY
Status: Definitive
Code: **3406FNDSCI** (121964)
Version Start Date: 01-08-2021

Owning School/Faculty: Biological and Environmental Sciences
Teaching School/Faculty: Biological and Environmental Sciences

Team	Leader
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Academic Level: FHEQ3 **Credit Value:** 20 **Total Delivered Hours:** 60
Total Learning Hours: 200 **Private Study:** 140

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	40
Online	2.5
Practical	12
Workshop	4

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	Report	Practical report	40	
Exam	Exam	End-of-semester exam	60	1.5

Aims

This module aims to examine the concepts of homeostasis, communication and transport within organisms and to provide an introduction to human and non-human animal anatomy and physiology

Learning Outcomes

After completing the module the student should be able to:

- 1 Define and use the common terms for absolute and relative anatomical position.
- 2 Describe the organisation of the human body into systems and their functions.
- 3 Identify and discuss the way these systems interact.
- 4 Review the mechanisms employed to produce a homeostatic state within living organisms with reference to specific physiological systems.
- 5 Apply skills in data analysis and interpretation

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Practical report	5				
Exam using MCQs	1	2	3	4	

Outline Syllabus

History of anatomy. Anatomical nomenclature. Tissues of the body. Integument. Developmental anatomy. The musculoskeletal system. The endocrine system. The nervous system. The heart and circulatory system. The lymphatic system. The respiratory system. The digestive system. The urinary system. The reproductive system. The relationship between form and function, adaptation to the environment reflected in physical structures and biochemical modification. The concept of homeostasis. Feedback mechanisms, positive and negative feedback and the steady state. Thermo-regulatory systems in animals. Diffusion and passive transport facilitated diffusion, active transport, co-transport, exocytosis and endocytosis, intestinal absorption and renal excretion. Circulatory systems and their characteristics. Open and closed circulatory systems. Neural and endocrine systems and their integration.

Learning Activities

This module provides an introduction to human and non-human anatomy and physiology using a systemic approach to the organisation and function of the organs and tissues of the body. The module will be delivered using a combination of lectures and practicals.

Notes

This module provides an introduction to the function and structure of living organisms. A comparative approach is taken to stress the organisation and integration of animal form and function. Additionally, the module provides students with an appreciation of the basic physiological mechanisms.