

Module Title:	Human Physiology
Credits:	5
NFQ Level:	6
Module Delivered In	1 programme(s)
Teaching & Learning Strategies:	Lectures, tutorials and laboratory practical classes; in-class quizzes/puzzles; video/CD animations; online learning; peer assessment using online assessment resources (PeerWise); peer learning using web-enabled and in-class student response systems (e.g. Kahoot); self-directed learning.
Module Aim:	The aim of this module is to provide a fundamental basis in the knowledge of human physiology- how the body is organised from cell to organ system, and how the systems interact
Learning Outcomes	
<i>On successful completion of this module the learner should be able to:</i>	
LO1	To understand the organisation of the human body; from the cellular level to the organisation of organs and organ systems
LO2	Discuss the structure and function of the body systems studied
LO3	Understand the fundamentals of the human body and disease- how the organ systems can be affected and how they can be treated
LO4	Develop computer and communication skills through report writing, laboratory investigations, and the use of library and online academic resources.
Pre-requisite learning	
Module Recommendations <i>This is prior learning (or a practical skill) that is recommended before enrolment in this module.</i>	
No recommendations listed	
Incompatible Modules <i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module.</i>	
No incompatible modules listed	
Co-requisite Modules	
No Co-requisite modules listed	
Requirements <i>This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.</i>	
No requirements listed	

Module Content & Assessment

Indicative Content

Introduction to Cell structure and Function

Overview of eukaryotic cell structure; cell organelle and cell membrane structure and function.

Tissue Structure and Organisation

The four main tissue types-Epithelia, connective tissue, muscle and nervous tissue. Theory will be supplemented with laboratory based histological slide examination

Endocrine System

General function and organisation of the endocrine system. General mechanisms of hormone control. Role of hormones, and receptors; Role of the hypothalamus pituitary unit in the maintenance of homeostasis; Role of the endocrine system in reproduction, fertility, lactation and menopause

Cardiovascular System

Organisation of the cardiovascular system; blood vessels; the heart; blood pressure and regulation of blood pressure ; Types of blood cells; pharmaceutical therapies of the cardiovascular system

Respiratory System

Structure and function of human respiratory system; Diseases and conditions of respiratory system and pharmaceutical therapies and intervention

The Musculoskeletal System

General organisation, structure and function of the human nervous system including the peripheral nervous systems and central nervous system; Role of the autonomic nervous system in the maintenance of homeostasis; Role of neurotransmitters and receptors; Structure and function of the central nervous system; Diseases affecting the nervous system.

Human Immune System

Overview of innate and acquired immunity; Cellular and humoral components of the human immune system; Inflammation, allergies and infection; Vaccines and the use of immunological techniques

Assessment Breakdown	%
Continuous Assessment	100.00%

Continuous Assessment

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Other	Continuous assessment will be based on several methods of assessment, including Research project, Peer Reviewed E-Flashcards presentations, In-class MCQ examinations, Case studies and Laboratory based written reports.	1,2,3,4	100.00	n/a

No Project

No Practical

No End of Module Formal Examination

SETU Carlow Campus reserves the right to alter the nature and timings of assessment

Module Workload

Workload: Full Time		
<i>Workload Type</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Lecture	12 Weeks per Stage	2.00
Lab/Lecture	12 Weeks per Stage	1.00
Independent Learning	15 Weeks per Stage	5.93
Total Hours		125.00

Module Delivered In

Programme Code	Programme	Semester	Delivery
CW_SAPHA_C	Higher Certificate in Science in Pharmacy Technician Studies	1	Mandatory