

#### MODULE SPECIFICATION

Part 1: Information							
Module Title	Applied Anatomy and Physiology for Paramedic Science						
Module Code	UZYRUN-30-1		Level	Level 4			
For implementation from	2020-21						
UWE Credit Rating	30		ECTS Credit Rating	15			
Faculty	Faculty of Health & Applied Sciences		Field	Allied Health Professions			
Department	HAS	HAS Dept of Allied Health Professions					
Module type:	Standard						
Pre-requisites		None					
Excluded Combinations		None					
Co- requisites		None					
Module Entry requirements		None					

# Part 2: Description

Educational Aims: See Learning Outcomes.

Outline Syllabus: The Human Body: Key Concepts:

Cell biology: Structure and functions, cell growth and proliferation.

Homeostasis and major homeostatic processes.

Biological chemistry relevant to paramedic practice.

Microbiology: the main classes of pathogenic micro-organisms, the spread of infection and infection control.

Tissue damage, healing and repair

Acids, bases and buffers; properties and reactions.

Immunology and the response to infection and injury

The factors influencing individual variations in human ability and health status including the fundamentals of genetics and genomics.

Nutrition and its role in health and illness.

The Human Body: A Systems Approach:

The anatomy and physiology of the:

Respiratory System: Including lung volumes, control of respiration, diffusion and gas exchange and pressure and gas laws.

Cardiovascular System: Including haemodynamics and viscosity in relation to blood flow, control of blood pressure, blood groups, haemostasis, osmosis and fluid and electrolyte balance.

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Nervous System: Including the central, peripheral and autonomic nervous system and neurotransmission.

Gastro-Intestinal System: Including digestion, absorption, structure and functions of liver, and formation and excretion of bile.

Genito-Urinary System. Reproductive System.

Endocrine System: Including hormones; types, mechanism of action.

Integumentary System. Lymphatic System.

Musculoskeletal System: Including bone growth and development, muscle physiology and neuromuscular control.

Teaching and Learning Methods: Scheduled learning includes lectures and tutorials.

Independent learning includes hours engaged with essential reading, reflective, comprehensive, interactive online learning materials, revision etc.

Students will typically engage in eight, 3-hour interactive lectures. Group sizes on the module vary but groups are typically up to 30. Students are also given access to bespoke, interactive learning resources for the module, containing a module guide, reading material, audios, games and quizzes giving opportunities to develop knowledge and understanding as they progress through the module. In addition, phone, email and discussion group contact with staff is available throughout the module and during scheduled tutorial time.

### Part 3: Assessment

#### Summative assessment

Component A: (50%) an online examination at the end of semester 2 will use MCQs to assess the breadth of the student's knowledge and will additionally assess learning from workshops and practicals through short answer questions. Rationale; to provide an opportunity to assess the student's general knowledge and understanding of all aspects of Life Sciences.

Component B: (50%): A structured oral and practical examination of up to 45 minutes to assess the students ability to identify anatomical structures and to describe function and purpose Rationale: To provide an opportunity for the student to demonstrate knowledge of anatomy and physiology and articulate using the correct anatomical and physiological terminology.

### Formative assessment

Will take place through clinical skills supervision and feedback, also tutorial support and reading by a personal tutor of draft work.

First Sit Components	Final Assessment	Element weighting	Description
Examination (Online) - Component A		50 %	Online examination (24 hours)
Practical Skills Assessment - Component B	<b>✓</b>	50 %	Online Structured oral and practical examination (SOPE)
Resit Components	Final Assessment	Element weighting	Description
Examination (Online) - Component A		50 %	Online examination (24 hours)
Practical Skills Assessment - Component B	<b>✓</b>	50 %	Online Structured oral and practical examination (SOPE)

Part 4: Teaching and Learning Methods								
Learning Outcomes	On successful completion of this module students will achieve the follo	wing learning	outcomes:					
	Module Learning Outcomes	Reference						
	Describe the essential concepts in biological chemistry and cell biology							
	Identify the fundamentals of human anatomy and physiology, recognising the dynamic relationships between anatomical structure and function							
	Explain the principles of homeostasis and major homeostatic process		MO3					
	Demonstrate an understanding of basic immunology and response to and injury	MO4						
	Recognise the role of nutrition in health and illness		MO5 MO6					
	Outline the factors influencing variations in human ability and health status, including the key concepts in genetics and genomics  Apply anatomical and physiological concepts to inform paramedic practice							
	Recognise human growth and development across the lifespan include factors influencing health status	ding the	MO8					
Contact Hours	Independent Study Hours:							
	Independent study/self-guided study	1	141					
	Total Independent Study Hours: 14							
	Placement Study Hours:							
	Placement	.41						
	Total Placement Study Hours:	41						
	Scheduled Learning and Teaching Hours:							
	Face-to-face learning	1	.8					
	Total Scheduled Learning and Teaching Hours:	8						
	Hours to be allocated  Allocated Hours	000						
Reading List	The reading list for this module can be accessed via the following link:  https://uwe.rl.talis.com/modules/uzyrun-30-1.html							

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## Part 5: Contributes Towards

This module contributes towards the following programmes of study:

Paramedic Science [Sep][DL][Glenside][3yrs] DipHE 2020-21

Paramedic Science [Mar][DL][Glenside][3yrs] DipHE 2020-21

Paramedic Science [Jul][DL][Glenside][3yrs] DipHE 2020-21

Paramedic Science [Dec][DL][Glenside][3yrs] DipHE 2020-21