



MODULE SPECIFICATION

Part 1: Information			
Module Title	Human Physiology		
Module Code	USSJXV-30-2	Level	Level 5
For implementation from	2020-21		
UWE Credit Rating	30	ECTS Credit Rating	15
Faculty	Faculty of Health & Applied Sciences	Field	
Department	HAS Dept of Applied Sciences		
Module type:	Standard		
Pre-requisites	Human Anatomy and Physiology 2019-20		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description
<p>Overview: The module will provide you with an introduction to the science that underpins human health; from cells through to systems that regulate everyday functions. You will explore the core concepts of human physiology with some examples of diseases in order to underpin your understanding of the normal physiology that controls the internal environment of the human body.</p> <p>Educational Aims: See Learning Outcomes.</p> <p>Outline Syllabus: Neuroanatomy and physiology, somatic and autonomic nervous system, structural organization of the central nervous system (CNS) and function of individual regions, organization and function of the peripheral nervous system (PNS), sensory systems: vision, hearing, taste, smell and pain, somatic neuromuscular control; types of muscle as effectors. Disorders of the nervous system.</p> <p>Cardiovascular system: cardiac muscle and intrinsic properties of the heart; extrinsic control; vascular system and peripheral resistance; regulation of cardiovascular parameters such as blood pressure. How the physiological processes described are evoked and/or altered during various abnormal cardiovascular states.</p> <p>Respiration: mechanics of lung ventilation; neural and chemical control; gas exchange and transport including acid-base considerations, changes in breathing patterns during physiological</p>

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stress

Metabolism and growth: digestion; structure and functional differentiation of human digestive tract; examples of integration of neural and endocrine control of motility and digestive secretions; metabolism and energy balance, physiology of vomiting endocrinology: selected examples from the endocrine system will be used to illustrate the role of hormones in homeostatic systems; physiological consequences of hormonal imbalance, endocrine disorders.

Renal and bladder physiology: nephron form and function; bladder structure and function, measures of function such as renal clearance, bladder compliance, detrusor pressure, fluid, electrolyte and acid-base balance; endocrinology as appropriate, including ADH, Aldosterone, ANP, Renin-Angiotensin system.

Applied physiology: examples of the integrative functioning of physiological systems under stress, to include dynamic, sustained exercise; extreme heat; stress, high altitude and the general adaptation syndrome.

Teaching and Learning Methods: You will learn the coupling of different body structures with function through a series of lectures and virtual practical sessions.

Part 3: Assessment

The controlled component is two written exams . The first exam will assess the first semester content and the second exam will assess the second semester content. This assessment will provide students with an opportunity to demonstrate both their knowledge on a broad range of topics through a series of multiple choice questions, and more in-depth knowledge through a selection of medium length questions. This assessment will test the full range of learning outcomes and will provide a valuable learning experience through recalling, applying and demonstrating knowledge which will be of benefit when progressing to final year modules.

The coursework is assessed through participation at virtual practical classes, where various pieces of work will be submitted as a practical portfolio, comprising short reports. This will require data collection, handling and interpretation, the application of learning from the lecture material and discussion of results.

Students are provided with formative feed-forward for their exam through a revision and exam preparation session prior to the exam and through the support materials supplied through Blackboard.

All work is marked in line with the Faculty of Health and Applied Sciences Generic Assessment Criteria for Level 2 and conforms to university policies for the setting, collection, marking and return of student work. Assessments are described in the Module handbook that is supplied at the start of module.

First Sit Components	Final Assessment	Element weighting	Description
Examination (Online) - Component A		25 %	Online examination (24 hours)
Examination (Online) - Component A	✓	25 %	Online examination (24 hours)
Portfolio - Component B		50 %	Practical portfolio (2000 words)
Resit Components	Final Assessment	Element weighting	Description
Examination (Online) - Component A	✓	50 %	Online examination (24 hours)
Report - Component B		50 %	Scientific report (2000 words)

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Part 4: Teaching and Learning Methods																	
Learning Outcomes	<p>On successful completion of this module students will achieve the following learning outcomes:</p> <table border="1"> <thead> <tr> <th style="text-align: left;">Module Learning Outcomes</th> <th style="text-align: left;">Reference</th> </tr> </thead> <tbody> <tr> <td>Explain the principles of operation of the major physiological systems (as in the condition of health), with particular reference to homeostasis</td> <td>MO1</td> </tr> <tr> <td>Relate particular practical investigative instrumentation / techniques in human physiology and pharmacology to the principles of operation noted above</td> <td>MO2</td> </tr> <tr> <td>Interpret data derived from practical investigations of physiology.</td> <td>MO3</td> </tr> </tbody> </table>	Module Learning Outcomes	Reference	Explain the principles of operation of the major physiological systems (as in the condition of health), with particular reference to homeostasis	MO1	Relate particular practical investigative instrumentation / techniques in human physiology and pharmacology to the principles of operation noted above	MO2	Interpret data derived from practical investigations of physiology.	MO3								
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Reading List	<p><i>The reading list for this module can be accessed via the following link:</i></p> <p>https://uwe.rl.talis.com/index.html</p>																

Part 5: Contributes Towards	
This module contributes towards the following programmes of study:	