

MODULE SPECIFICATION

Part 1: Basic Data					
Module Title	Anatomy and Physiology (Premedical Science)				
Module Code	USSJYD-30-1	Level	1	Version	2
Owning Faculty	Health and Applied Science	Field	Applied Science		
Contributes towards	Premedical Science (Cert HE)				
UWE Credit Rating	30	ECTS Credit Rating	15	Module Type	Standard
Pre-requisites	none		Co- requisites	none	
Excluded Combinations	None		Module Entry requirements	n/a	
Valid From	September 2014		Valid to	2020	

CAP Approval Date	28/03/2014
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Part 2: Learning and Teaching	
Learning Outcomes	<p>On successful completion of this module students will be able to:</p> <p>Use and understand basic anatomical terminology (A, B)</p> <p>Explain the principles of physiological control mechanisms, (A, B)</p> <p>Describe the differences between different connective tissue types and relate key properties to their function (A)</p> <p>Identify major bones of the human skeleton, including key surface landmarks (A, B)</p> <p>Describe the position, orientation, and gross anatomy of major organs to their respective systems (A, B)</p> <p>To Explain relationships between the function and location of key systems (A, B)</p> <p>Describe the structure and function of the endocrine and nervous systems (A)</p> <p>Understand the sensory and locomotor aspects of the nervous system (A)</p> <p>Describe the principles of diagnostic imaging and show a working knowledge of simple interpretation (A, B)</p> <p>Demonstrate practical skills in data observation, collection, handling and report writing, and relate outcomes to the relevant physiology (B)</p>
Syllabus Outline	Anatomical terminology as it relates to body posture and describing orientation of organs/limbs in a clinical setting

	<p>Major skeletal structure, including an introduction to bone growth and development</p> <p>Connective tissues: Introduction into cell types that make up the various connective tissues, and the function of connective tissue in the human body</p> <p>Major muscle groups, including their relationship to connective tissues</p> <p>Histological structure of endocrine, nerve and muscle tissues.</p> <p>Endocrinology; structure and function of the key endocrine organs and its relationship to homeostasis and normal function</p> <p>Introduction to the Nervous System to include gross anatomy of the brain and spine. The electrochemical nature of nervous signals. Membrane and action potentials, nerve conduction, synaptic transmission.</p> <p>An introduction to the pharmacological nature of the autonomic nervous system. The neurotransmitters and receptors involved in autonomic function.</p> <p>Structure of the heart and its associate with major blood vessels, including lung structure and its relationship to the heart and associated function</p> <p>The structure of the organs that make up the GI system, with focus on adaptations of each to carry out specific functions relating to stages of digestion</p> <p>The structure of the kidneys and bladder, including nervous control of micturition</p> <p>Structure and function of the male and female reproductive system.</p> <p>The process of human development from fertilisation to adulthood</p>
<p>Contact Hours</p>	<p>72hrs – 24 lectures, 12 practicals</p> <p>Typically lectures of 2hrs will be followed by a 1hr lecture in the same week, alternating weeks with a 3hr practical</p> <p>This contact time will also be underpinned by provision of online material to be delivered in an asynchronous manner through the University's E-Learning Environment Blackboard, including for example additional recorded lectures, case studies to work through and online quizzes.</p>
<p>Teaching and Learning Methods</p>	<p>This module is a core module for multiple programmes and so must cover an appropriate breadth and depth of knowledge to service all requirements, both accredited and non-accredited. The module therefore aims to deliver specialist knowledge through taught lectures, together with inductive tutorials and seminars to enable application and problem-solving utilising this knowledge. Student learning will be further supported through the University's E-Learning Environment, Blackboard, with provision of materials and activities to guide independent study.</p> <p>Scheduled learning includes lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work based learning; supervised time in studio/workshop.</p> <p>Independent learning includes hours engaged with essential reading, case study preparation, assignment preparation and completion etc. These sessions constitute an average time per level as indicated in the table below. Scheduled sessions may vary slightly depending on the module choices you make.</p>
<p>Key Information Sets Information</p>	<p>Key Information Sets (KIS) are produced at programme level for all programmes that this module contributes to, which is a requirement set by HESA/HEFCE. KIS are</p>

comparable sets of standardised information about undergraduate courses allowing prospective students to compare and contrast between programmes they are interested in applying for.

Key Information Set - Module data				
<i>Number of credits for this module</i>				20
Hours to be allocated	Scheduled learning and teaching study hours	Independent study hours	Placement study hours	Allocated Hours
300	72	228	0	300

The table below indicates as a percentage the total assessment of the module which constitutes a -

Written Exam: Unseen written exam, open book written exam, In-class test

Coursework: Written assignment or essay, report, dissertation, portfolio, project

Practical Exam: Oral Assessment and/or presentation, practical skills assessment, practical exam

Please note that this is the total of various types of assessment and will not necessarily reflect the component and module weightings in the Assessment section of this module description:

Coursework assessment percentage	0%
Practical exam assessment percentage	30%
	100%

Reading Strategy

All students will be encouraged to make full use of the print and electronic resources available to them through membership of the University. These include a range of electronic journals and a wide variety of resources available through web sites and information gateways. The University Library's web pages provide access to subject relevant resources and services, and to the library catalogue. Many resources can be accessed remotely. Students will be presented with opportunities within the curriculum to develop their information retrieval and evaluation skills in order to identify such resources effectively.

Any **essential reading** will be indicated clearly, along with the method for accessing it, e.g. students may be expected to purchase a set text, be given or sold a print study pack or be referred to texts that are available electronically, etc. This guidance will be available either in the module handbook, via the module information on Blackboard or through any other vehicle deemed appropriate by the module/programme leaders.

If **further reading** is expected, this will be indicated clearly. If specific texts are listed, a clear indication will be given regarding how to access them and, if appropriate, students will be given guidance on how to identify relevant sources for themselves, e.g. through use of bibliographical databases.

Indicative Reading List

Moore, K.L. Dalley, A.F., and Argur, A. M.R. (2013) *Clinically Oriented Anatomy* Philadelphia, PA: Lippincott Williams and Wilkins.

Argur, A.M.R. and Dalley, A. (2012) *Grant's Atlas of Anatomy* 13th ed. Philadelphia,

PA: Lippincott Williams and Wilkins.

Patton, K. T., Thibodeau, G.A. (2012) *Anatomy & Physiology* 7th ed. St. Louis, Mo. : Mosby Elsevier

Marieb E.N. (2011) *Human Anatomy & Physiology*. 9th ed.. Harlow: Pearson

Martini, O.(2011) *Visual Anatomy & Physiology*. San Fransisco, CA: Benjamin Cummings.

Stanfield, C.L. (2009) *Principles of Human Physiology*. 4th ed.. Harlow: Pearson Education Ltd.

Silverthorn, D. (2010) *Human Physiology an Integrated Approach*. 5th ed.. Harlow: Pearson Education Ltd.

Tortora, G.J. & Derrickson, B. (2010) *Essentials of Anatomy & Physiology*. 8th ed. New York: Wiley

Part 3: Assessment

Assessment Strategy

The Assessment Strategy has been designed to support and enhance the development of subject-based knowledge and skills, whilst ensuring that the Learning Outcomes are achieved.

The nature of this module, and the program to which it relates, necessitates continuous assessment throughout.

Summative assessment for this module will be provided using a number of approaches. The nature of the premedical sciences programme to which this module contributes requires continuous, interim and final assessment of student learning and a measure of their acquisition of written presentation skills of analysed data.

The controlled conditions assessment for this module comprises MCQ and SAQ style questions covering both theoretical (lecture based) and practical (laboratory based) knowledge and understanding. The exam will be broken down into topic specific sections to guarantee adequate coverage of all key areas to map to the learning outcomes as well as more detail, interpretive answers required for those questions based on the practicals covered during the year.

The coursework component is designed to assess the student's ability to interpret data, explain experimental findings and physiological outcomes, and relate the results of practical experiments to the anatomy and physiology of the system being studied. This will include both the write-up of a data set collected during a practical as a short report, and the completion of a practical portfolio.

Continuous assessment within component B will be provided by the use of frequent multiple choice question tests throughout the module and following blocks of learning provided in the form of lectures. These tests will be provided online, marked automatically and the results integrated with the grade centre in Blackboard.

Both formative and summative feedback is available through the year by way of the VLE (Blackboard), with more specific feedback provided either individually or more generally when appropriate and depending on the nature

	of the assignment/learning task.
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Identify final assessment component and element			
% weighting between components A and B (Standard modules only)		A:	B:
		40	60
First Sit			
Component A (controlled conditions)		Element weighting	
Description of each element		(as % of component)	
1. EX1 Written examination (1.5 hrs) covering lecture content in semester 1 (Assessment period 1)		50	
2. EX2 Written examination (1.5 hrs) covering lecture content in semester 2 (Assessment period 2)		50	
Component B		Element weighting	
Description of each element		(as % of component)	
1. CW1. Practical assessment		50	
2. CW2. Frequent in class MCQ assessment		50	

Resit (further attendance at taught classes is not required)			
Component A (controlled conditions)		Element weighting	
Description of each element		(as % of component)	
1. EX3 Extended written examination (3hrs)		100	
Component B		Element weighting	
Description of each element		(as % of component)	
1. CW3 Essay based assessment on topic to be determined (1500 words)		50	
2. In class, online assessment under controlled conditions		50	
If a student is permitted an EXCEPTIONAL RETAKE of the module the assessment will be that indicated by the Module Description at the time that retake commences.			