



ACADEMIC SERVICES

MODULE SPECIFICATION

Part 1: Basic Data					
Module Title	Anatomy and Physiology				
Module Code	USSJT8-30-1	Level	1	Version	1.3
UWE Credit Rating	30	ECTS Credit Rating	15	WBL module?	No
Owning Faculty	Health and Applied Sciences	Field	Healthcare Science		
Department	Biological, Biomedical and Analytical Sciences	Module Type	Standard		
Contributes towards	FdSc Healthcare Science BSc (Hons) Healthcare Science (Life Science)				
Pre-requisites	None	Co- requisites	None		
Excluded Combinations	None	Module Entry requirements	None		
First CAP Approval Date	21 st November 2012	Valid from	September 2015		
Revision CAP Approval Date	v1.2 - 2 June 2015 v1.3 – 2 February 2016	Revised with effect from	September 2015 September 2016		

Part 2: Learning and Teaching	
Learning Outcomes	<p>On successful completion of this module students will be able to (assessment intended for each learning outcome designated by [*] corresponding to assessment section):</p> <p>Core learning outcomes</p> <ul style="list-style-type: none"> • Use and understand basic anatomical terminology [A1, B2] • Explain the principles of homeostasis and recognise homeostatic control mechanisms, [A2, B2] • Describe the differences between connective tissue types at the cellular and tissues levels [A2, B2] • Identify major bones of the human skeleton, including key surface landmarks [A1, A2, B2] • To be able to relate the position, orientation, and gross anatomy of major organs to their respective systems [A1, A2, B2] • To understand the structure and function of key core systems, such as respiratory, cardiovascular, endocrine, and renal [A2,B2] • To understand the structure and function of key systems, such as reproductive, gastrointestinal, neurological [A2, B2] • Describe the principles of diagnostic imaging and show a working knowledge of simple interpretation [A1, B1, B2] • Demonstrate practical skills in data observation, collection, handling and report writing [B1] • Discuss the importance of effective multidisciplinary team working in the investigation and treatment of relevant disorders [B1]. • Demonstrate a broad basic and clinical sciences knowledge and apply that

	<p>knowledge with respect to Cardiology, Vascular, Neurophysiology, Respiratory and Sleep Sciences [A2].</p> <p>Selected learning outcomes (choice of one pathway):</p> <p>Life Sciences Pathway</p> <ul style="list-style-type: none"> Understand and discuss the histological differences of several key systems [A2] <p>Physiological Sciences Pathway</p> <ul style="list-style-type: none"> Demonstrate a broad basic and clinical sciences knowledge and apply that knowledge with respect to Sleep Sciences [A2]. <p>Clinical Engineering Pathway</p> <ul style="list-style-type: none"> Explain the principles of inheritance, DNA and genetics and their role in medicine [A2]
Syllabus Outline	<p>This module provides the learner with essential knowledge and understanding of the anatomy and physiology of the human body.</p> <ul style="list-style-type: none"> Anatomical terminology Cells to systems, and an introduction to the skeletal system Muscle structure and function, and major muscle groups The brain and nervous system Nerves and synapses Cardiovascular and respiratory systems Respiratory system and pressure and ventilation Reproductive systems Renal and urinary Gastrointestinal and hepatobiliary <p>Selected syllabus (choice of one pathway):</p> <p>Life Sciences Pathway</p> <ul style="list-style-type: none"> Endocrinology and cross sectional anatomy Human development and gross anatomy of the kidneys <p>Physiological Sciences Pathway</p> <ul style="list-style-type: none"> Blood pressure and mechanics Sleep Physiology <p>Clinical Engineering</p> <ul style="list-style-type: none"> Genetics Molecular Biology
Contact Hours	<p>There will be 3 weeks of contact time at UWE in 3 x 1 week blocks. Included in each block week are laboratory workshops, lectures and tutorials. The contact time will equate to approximately 6 hours per block (a total of 18 hours).</p> <p>In addition to the allocated hours on campus learning, students will engage in synchronous and asynchronous online learning. This will comprise a total of approximately 54 hours of online engagement through a combination of lectures, synchronous online tutorials, synchronous and asynchronous discussions, online quizzes, and collaborative group work</p>
Teaching and Learning Methods	<p>The strategy of this module is to provide a platform for students to gain an understanding of the anatomy and physiology of the human body.</p> <p>Students are expected to spend 72 hours on scheduled learning and 228 hours on independent learning. Theoretical material within the module will be presented to the students in the form of regular lectures throughout each of the semesters in the academic year. During those times of work based learning, these lectures will be</p>

delivered online and involve a number of technological enhancements. The learning of lecture content will be reinforced through time spent in independent learning by the directed reading of recommended texts and through the use of technology enhanced learning resources that will be provided online. This online learning and engagement will be delivered through several avenues:

- Synchronous online tutorials in protected learning time where the student will contribute/attend an online activity appropriate to the content at the time at which the academic will be present online to facilitate and lead this scheduled/timetabled session. This tutorial will be themed/planned.
- Asynchronous discussions in the student's own time (or during protected time where permitted and appropriate) where they will engage/collaborate with other students on the course or in specified groups, and in which the academic is permitted to moderate where necessary, but is not expected to contribute.
- Synchronous surgery sessions timetabled for a specific time in which the academic will be available online to answer live questions via discussion boards/blogs/collaborate or to respond to questions posted/asked prior to the session.
- Interactive, online formative quizzes made available either following a particular package of knowledge exchange/learning, or in specified sessions/time periods.
- Lectures delivered online through a combination of one or more of the following: visual/audio/interactivity/personal formative assessment

A number of relevant practical sessions will be incorporated during the campus based blocks in addition to the work based learning that must be achieved under supervision by a workplace supervisor. Practical sessions will both drive hands on learning and the acquisition of technical skills at both an individual and group working level.

The remainder of the independent learning time allocated to the module should be spent preparing written assessments for submission [B1, B2], and undertaking revision for the exams [A1, A2].

Scheduled learning includes lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work based learning; supervised time in studio/workshop.

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.

Key Information Sets Information

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 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>				30
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:

Total assessment of the module:			
Written exam assessment percentage		40%	
Coursework assessment percentage		60%	
Practical exam assessment percentage		0%	
			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.

A detailed reading list will be made available through relevant channels, e.g. module handbooks, Blackboard, etc.

Indicative Reading List

Core recommended texts:

Moore, K.L., Dalley, A.F. and Agur, A.M.R. (2009) *Clinically Oriented Anatomy*. Philadelphia: Lippincott Williams and Wilkins.

Patton, K.T. and Thibodeau, G.A. (2012) *Anatomy & Physiology*. Cambridge: Elsevier.

Additional recommended useful texts:

Agur, A.M.R. and Dalley, A.F. (2012) *Grant's Atlas of Anatomy*. 13th ed. Philadelphia: Lippincott Williams and Wilkins.

Marieb, E.N. (2011) *Human Anatomy & Physiology*. Harlow: Pearson.

Ober, M. (2011). *Visual Anatomy & Physiology*. San Francisco: Pearson Benjamin Cummings.

Stanfield, C.L. (2009) *Principles of Human Physiology*. Harlow: Pearson.

Silverthorn, D. (2012) *Human Physiology an Integrated Approach*. Harlow: Pearson.

Tortora, G.J. and Derrickson, B. (2011) *Essentials of Anatomy & Physiology*. Ames: Wiley-Blackwell.

Part 3: Assessment

Assessment Strategy

The Assessment Strategy has been designed to support and enhance the development of both subject-based and more general skills, whilst ensuring that the modules learning outcomes are attained, as described below.

Component A

The written exams will provide students with an opportunity to demonstrate both their knowledge on a broad range of topics through a series of short answer questions, and more in-depth knowledge through a selection of medium length questions.

Component B

The ability of the students to write scientifically and analyse data will be assessed under the first element in the form of a practical report. These will be marked and feedback provided in the form of written comments.

The second element is an essay in order to test the students' ability to critically discuss a scientific topic.

Formative feedback is available to students throughout the module through group discussions, and in workshops. Students are provided with formative feed-forward for their exam through a revision and exam preparation session prior to the exam and through the extensive support materials supplied through Blackboard.

All work is marked in line with the Department's Generic Assessment Criteria and conforms to university policies for the setting, collection, marking and return of student work. Where an individual piece of work has specific assessment criteria, this is supplied to the students when the work is set.

This assessment strategy has been designed following best practice on effective assessment from JISC (<http://www.jisc.ac.uk/whatwedo/programmes/elearning/assessment/digiassess.aspx>) and The Open University's Centre for Excellence in Teaching and Learning (<http://www.open.ac.uk/opencetl/centre-open-learning-mathematics-science-computing-and-technology/activities-projects/e-assessment-learning-the-interactive-comp>).

Technical design and deployment of the activities will also follow best practice developed at UWE by the Education Innovation Centre in collaboration with academic colleagues across the university. Staff guidance and support are already in place (<http://info.uwe.ac.uk/online/Blackboard/staff/guides/summative-assessments.asp>).

Identify final assessment component and element	Component A2	
% weighting between components A and B (Standard modules only)	A:	B:
	40	60
First Sit		
Component A (controlled conditions) Description of each element	Element weighting (as % of component)	
1. Examination (1.5 hours)	50%	
2. Examination (1.5 hours)	50%	
Component B Description of each element	Element weighting (as % of component)	
1. Practical report (1500 words)	50%	
2. Essay based report (500 words)	50%	

Resit (further attendance at taught classes is not required)		
Component A (controlled conditions) Description of each element	Element weighting (as % of component)	
1. Examination (2 hours)	100%	
Component B Description of each element	Element weighting (as % of component)	
1. Practical report (1500 words)	50%	
2. Extended essay based report (500 words)	50%	
If a student is permitted a retake of the module under the University Regulations and Procedures, the assessment will be that indicated by the Module Description at the time that retake commences.		