University of the West of England
BRISTOL

ACADEMIC SERVICES

MODULE SPECIFICATION

Part 1: Basic Data						
Module Title	Foundation Human Biology					
Module Code	UZYRFK-15-0		Level	0	Version	1
Owning Faculty	Health and Applied Sciences		Field	Allied Health Professions		
Contributes towards	Foundation Programme for Health Professions					
UWE Credit Rating	15	ECTS Credit Rating	7.5	Module Type	Standard	
Pre-requisites	N/A		Co- requisites	N/A		
Excluded Combinations	N/A		Module Entry requirements	N/A		
Valid From	September 2014		Valid to	September 2020		

CAP Approval Date	29/05/2014

Part 2: Learning and Teaching	
Learning Outcomes	On successful completion of this module students will be able to: • Explain the relationships between cells, tissues, organs and systems (Component A) • Describe the basic characteristics and functions of cells (Component A) • Describe the structure of the musculoskeletal, circulatory and respiratory systems and explain their functional roles (Component A) • Relate biological theory to health and well-being (Component A) • Utilise basic information retrieval skills (Component B) • Develop effective study skills (Component A and B)
Syllabus Outline	**Basic characteristics of all living organisms** Role and structure of cells Cellular, tissue, organ and system levels of organisation Structure of cells as seen using an optical and electron microscope Functional relationships between the main organelles **Biochemical basis of life** Structure and importance of carbohydrates, proteins and lipids Main source of carbohydrates, proteins and lipids for heterotrophic nutrition and DNA Analysis of food for the presence or absence of carbohydrates, proteins and lipids.

	Transport in and out of cells Diffusion, osmosis, facilitated and active transport **Structure of the skeletal system and its functional role** Principle bones in the human body Functions of skeletal system Structural components of long bones and their functions Microscopic structure of cartilage, spongy and compact bone and their functions **Development and maintenance of bone** Dietary needs for healthy bone growth Ossification of long bone during growth and development **Structure of joints and their functions in the human body** Main types of joints and their movement Components of a synovial joint and their function Cause, symptoms and treatment for a joint disorder **Structure of skeletal muscle and its functions** Naming of skeletal muscles Ultrastructure of skeletal muscle and function Actin and myosin and sliding filament theory Structure and function of the neuromuscular junction **Human circulatory system and its functions** Structure and functions of arteries, veins and capillaries Double circulatory system Structure and function of the heart and the cardiac cycle Mechanisms controlling heart rate (during and after exercise) Structure and function of components of blood **Human respiratory system and its functions** Mechanisms of ventilation, inspiration and expiration Histology of lung tissue and gaseous exchange
Contact Hours	This module operates on the basis of 150 hours of study in total. This includes 90 hours of scheduled teaching • Lectures and workshops 36 hours • Laboratory sessions 36 hours • Tutorials 18 hours
Teaching and Learning Methods	**Scheduled learning** includes lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops. **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.
Key Information Sets Information	

Hours to be allocated	Scheduled learning and teaching study hours	Independent study hours	Placement study hours	Allocated Hours	
150	90	60	0	150	

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

Written Exam: Unseen written exam.
Coursework: Written assignment or essay, report.

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	70%
Coursework assessment percentage	30%
	100%

Reading Strategy

Students will be directed to reading which is either available electronically or in paper format. They will also be expected to read more widely by identifying relevant material using the Module Handbook, the UWE Library Catalogue and LRC at CoBC and resources such as those listed below:

www.innerbody.com

www.bioanim.com

http://www1.uwe.ac.uk/library/

Indicative Reading List

Essential reading list;
Waugh, A. and A. Grant. (2010). *Ross and Wilson Anatomy and Physiology in Health and Illness*. 11th Ed. London: Churchill-Livingstone

Recommended reading list;
Comerford, K., (Ed.) (2009). *Anatomy and physiology made incredibly easy.* 3rd Ed., US: Lippincott Williams & Wilkins.

Kahle, W. and M. Frotscher. (2011). *Colour Atlas of Human Anatomy*. 6th Ed.

	Vol 3. USA: Thieme: 42-102 Pickering, W. R. (2009). *AS and A Level Biology Through Diagrams*. Oxford : Oxford Revision Guides Roberts, A., (2010). *The Complete Human Body*. London: Dorling Kindersley Starr, C. & McMillan, B. (2014) *Human Biology.* UK: Brooks/Cole - Cengage Learning. Tortorah G., & Grabowsji, S (2010). *Principles and Anatomy and Physiology.* 8th Ed. London: John Wiley and Sons. Waugh, A., Grant, A., Chambers, G. & Ross, J.S. (2006) *Ross and Wilson anatomy and physiology in health and illness.* London: Churchill Livingstone Elsevier. **Websites** http://www.primalonlinelearning.com/MySubscription.aspx Subscription required – great site for all biology material http://www.bbc.co.uk/science/humanbody/body/index_interactivebody.shtml BBC web site for A level biology http://www.s-cool.co.uk/a-level/biology S-cool A level web site http://www.becomehealthynow.com/category/body/ General coverage of A level material http://www.biologymad.com/master.html?http://www.biologymad.com/NervousSystem/NervousSystem.htm General coverage of A level material with tests Other titles as available on UWE and CoBC library holdings.

Part 3: Assessment	
Assessment Strategy	Regular formative assessment will take place throughout the module delivery to enable students to gauge their progress and learning to date. Summative assessment will be by means of a 1.5 hour written exam and submission of a 1,250 word report on a specific topic.

Identify final assessment component and element	**Component A**	
% weighting between components A and B (Standard modules only)	**A:** **70%**	**B**: **30%**
First Sit		

Component A (controlled conditions) **Description of each element**	**Element weighting** **(as % of component)**
1. Exam (1.5 hour) written examination	100
Component B **Description of each element**	**Element weighting** **(as % of component)**
1. Written report (1,250 words)	100

Resit (further attendance at taught classes is not required)	
Component A (controlled conditions) **Description of each element**	**Element weighting** **(as % of component)**
1. Exam (1.5 hour) written examination	100
Component B **Description of each element**	**Element weighting** **(as % of component)**
1. Written report (1,250 words)	100
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.	