

Module Details				
Module Title	Systems, Physiology and Anatomy			
Module Code	CLS4011-U			
Academic Year	2021/2			
Credits	80			
School	School of Pharmacy and Medical Sciences			
FHEQ Level	FHEQ Level 4			

Contact Hours				
Туре	Hours			
Directed Study	695			
Lectures	60			
Tutorials	10			
Practical Classes or Workshops	35			

Availability				
Occurrence	Location / Period			
BDA	University of Bradford / Academic Year			

Module Aims

To provide an introduction to the molecules, cells and tissues which underpin normal structure and function of the human body and to provide basic knowledge of embryology and genetics. To provide an introduction to the physiology, pharmacology, infection and immunology which underpin normal structure and function. To facilitate an understanding of how abnormalities of structure can lead to functional disorder and disease processes and the scientific basis for infectious and non-infectious disease.

Cells and Organelles Proteins and Enzymes Tissue Structure and Function

Scientific basis for infectious and non-infectious disease

Infection & Disease Cardiovascular System Respiratory System Gastrointestinal system Renal System Reproductive System Nervous system

Learning Outcomes				
Outcome Number	Description			
1	Describe the normal structure and function of molecules, cells and tissues which underpin normal structure and function and their relevance to the diagnosis of disease.			
2	Describe the fundamentals of anatomy, physiology, pharmacology, infection and immunology which underpin normal structure and function and their relevance to the diagnosis of disease and therapeutic strategies.			
3	Use basic histological techniques, be able to recognise cells, tissues and organs, successfully use a light microscope, describe and recognise transmission electron microscope images.			
4	Describe the stages in development of the human embryo.			
5	Describe the structure and function of the human cardiorespiratory and renal systems along with the gastro-intestinal tract and related organs.			
6	Understand control of respiration and cardiovascular function and the clinical assessment of cardiorespiratory and renal function.			
7	Describe the features of common diseases and their treatments.			
8	Discuss the basic principles of human nutrition and be aware of the common diseases affecting the GI tract and their treatment.			
9	Demonstrate a knowledge of basic laboratory skills and their importance in diagnostics.			
10	Interpret and gather scientific and clinical data.			
11	Apply scientific principles to medical practice.			
12	Review your progress on the module and work to clearly defined targets.			

Learning, Teaching and Assessment Strategy

The knowledge and understanding required will be delivered in lectures. Problem-solving tutorials and workshops will be used to reinforce the taught component with opportunities to practise problem solving using a mixture of exam-style questions. Feedback during tutorials and instant (computer-marked) formative quizzes will enable you to monitor your progress. You will use your independent study time to access suggested resources for further reading, to practise problem solving and to monitor and direct your own learning. Anatomy, lab and clinical skills sessions will be used to deliver materials and deepen understanding of the relevant subject.

Formative assessment in the form of timed Canvas quizzes will be made available throughout the year. Ongoing summative assessment will encourage student engagement.

The ability to write scientifically and synthesise knowledge will be assessed by writing a drug monograph and lab report. A synoptic assessment and anatomy spot test will determine if students are able to meet the module learning outcomes.

Mode of Assessment					
Туре	Method	Description	Weighting		
Summative	Coursework - Written	Drug Monograph (1500 words)	10%		
Summative	Laboratory Report	Lab Report (1300 words)	10%		
Summative	Examination - MCQ	Anatomy (1 Hr)	20%		
Summative	Examination - MCQ	On-going assessment at the end of each unit (Supp: 1 Hr Viva on failed components) (3 Hrs)	20%		
Summative	Computer-based assessment	Synoptic Assessment (4 Hrs)	40%		

Reading List

To access the reading list for this module, please visit <u>https://bradford.rl.talis.com/index.html</u>

Please note:

This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.

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