UNIVERSITY of BRADFORD

Module Descriptor

Module Details	
Module Title	Human Biology
Module Code	CLS4013-C
Academic Year	2023/4
Credits	30
School	School of Pharmacy and Medical Sciences
FHEQ Level	FHEQ Level 4

Contact Hours	
Type	Hours
Lectures	35
Lectures	35
Practical Classes or Workshops	40
Directed Study	225

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

Module Aims

To develop knowledge and understanding of cell components, the processes underlying cellular metabolism, the principles and importance of homeostasis, and the roles of the nervous and endocrine systems in homeostatic co-ordination and response.

Outline Syllabus

Prokaryotic and eukaryotic cells. Structure and biological roles of the main macromolecules. Functions of the main organelles of a eukaryotic cell.
Biological role of enzymes and the mechanism by which they work. Protein synthesis. Release of energy in living cells.
Antibiotics and antimicrobial chemotherapy.
Introduction to Body Tissues and organ systems.
Homeostasis. Role of positive and negative feedback system in maintaining homeostasis.
Functions, organisations, and roles of the nervous and endocrine systems. Transmission of electrical impulses along the nerve and across the synapse. Roles of the nervous and endocrine systems in the regulation and control of body fluids, glucose, and electrolytes.

Learning Outcomes	
Outcome Number	Description
01	Describe the structure and function of prokaryotic and eukaryotic cells and major macromolecules.
02	Explain enzyme function, protein synthesis and cellular respiration.
03	Describe the key features of human tissues and organ systems.
04	Explain the principles of homeostasis and the regulation and control of body processes by the nervous and endocrine systems.
05	Carry out laboratory investigations.
06	Understand principles behind good experimental design.
07	Describe the factors required to ensure safe working in the laboratory.
08	Apply your study skills to carry out independent study in an area of applied biology.
09	Write up a laboratory report based on data obtained from a laboratory practical.

Learning, Teaching and Assessment Strategy

The knowledge and understanding required for this module will be delivered in lectures, supported with workshops, tutorials and laboratory practical's which will allow students to explore the concepts in more depth. Students will be expected to further enhance their understanding and apply their knowledge during self-directed study, in preparation for lectures, tutorials, workshops, and laboratory classes and assessments.

A formative multiple choice question test will allow students to assess their knowledge, identify any areas of weakness and gain familiarity with the examination format and procedure in preparation for the summative assessments. Summative assessment will comprise of a laboratory report and two multiple choice question examinations.

Mode of Assessment			
Type	Method	Description	Weighting
Summative	Online MCQ Examination	Semester 1: Computer-based multiple choice examination (60 minutes)	35%
Summative	Laboratory Report	Lab report (1500 words)	30%
Summative	Online MCQ Examination	Semester 2: Computer-based multiple choice examination (60 minutes)	35%

Reading List

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

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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