

Module Details	
Module Title	Introducing Paramedic Science
Module Code	PAS4001-E
Academic Year	2024/5
Credits	60
School	School of Allied Health Professions and Midwifery
FHEQ Level	FHEQ Level 4

Contact Hours	
Type	Hours
Seminars	9
Online Lecture (Synchronous)	12
Laboratories	3
Independent Study	444
Lectures	100
Groupwork	20
Online Lecture (Asynchronous)	6
Tutorials	6

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

Module Aims
To develop knowledge and understanding of the underlying theories and concepts of human biology, clinical science and public health that inform contemporary paramedic practice. To prepare the student for the application of theory into clinical practice.

## Outline Syllabus

Cell Structure. The organisation of the body into systems. Homeostasis. Anatomy and physiology of the haematological system, cardiovascular system, respiratory system, skeletal system, nervous system, gastrointestinal system, genitourinary system and endocrine system.

Laboratory work using appropriate technologies; including associated health and safety, report writing and presentation of data including descriptive analysis. Patient safety, including human factors and improvement science. Inter-professional education and multi-disciplinary team working. Psychology and sociology of health. Public health and epidemiology. Dementia and care of those in distress. Research skills including referencing and application of journal material into assignments. Presentation skills. Portfolio development. Introduction to the TBL methodology of learning and group working skills.

## Learning Outcomes

Outcome Number	Description
01	Recognise anatomical, medical, and physiological terminology.
02	Interpret clinical features, together with physiological data and scientific units of measurement commonly utilised in practice to inform clinical decision-making and determine diagnoses.
03	Distinguish between normal and altered anatomy and physiology sufficient to be able to recognise the presence of health, illness, injury, disease, disorder, altered cognitive state, and dysfunction.
04	Accurately and systematically interpret data arising from tests routinely used in paramedic practice.
05	Discuss how data arising from routine clinical tests can be used to explain potential underlying anomalies in patient physiology.
06	Present complex clinical data in a structured conventional scientific format.
07	Demonstrate how the public health agenda affects contemporary paramedic practice.
08	Explain core concepts of epidemiology.
09	Identify the key ethical, legal, and professional frameworks which underpin the delivery of contemporary paramedic practice.
10	Develop group working skills

## Learning, Teaching and Assessment Strategy

Research informed student centred tutorials, lectures and workshops will deliver core content; providing students with the opportunity to develop knowledge and conceptual understanding.

Directed study will include preparation for the tutorials/workshops.

Learning outcome 1, 2, 3, 4, 6, 7, 8, 10, and 11 will be facilitated through student centred tutorials, supported by web-based resources, workshops and lectures. Learning outcomes 5, 9, 10 and 11 will be facilitated through laboratory workshops, practical exercises/simulated clinical skills. Directed study will include preparation for the tutorials/workshops, and opportunities for formative guided study activities on key topics..

### Assessment:

The MCQ exam will assess learning outcomes 1-3

The laboratory report will assess learning outcomes 4-6

The group presentation will assess learning outcomes 7-10

The group presentation is preceded by a formative group seminar.

The laboratory report will be preceded with formative assessment and feedback which will either be timetabled, or be available by request, from either module leads or Personal Academic Tutors.

Sample MCQ questions are provided for student review ahead of the end of year MCQ assessment.

## Mode of Assessment

Type	Method	Description	Weighting
Summative	Computerised examination	Multiple Choice/Extended match Questions, Pass at 40% (2 Hrs)	35%
Summative	Laboratory Report	Record of laboratory work (1500 words) Pass at 40%	35%
Summative	Presentation	Group presentation Must Pass at 40% (45 Mins)	30%

## 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.*