

Module Details	
Module Title	Cross sectional Imaging 1
Module Code	RAD4504-B
Academic Year	2024/5
Credits	20
School	School of Allied Health Professions and Midwifery
FHEQ Level	FHEQ Level 4

Contact Hours	
Type	Hours
Lectures	15
Placement	18 (of which 9 are virtual simulated placement activities)
Directed Study	3
Independent Study	161
Seminars	3

Availability	
Occurrence	Location / Period
BDA	University of Bradford / Semester 2

Module Aims
<p>The module will develop student understanding of the physical principles underpinning different cross-sectional imaging modalities and the normal anatomical image appearances. Student practical knowledge and skills development will be supported to enable them to assist in the safe preparation and support of service users undergoing cross-sectional imaging examinations.</p>

Outline Syllabus
<p>The fundamental physical principles of cross-sectional imaging technologies (Computed Tomography; Magnetic Resonance Imaging; Ultrasound) and their application in clinical practice. Normal anatomical cross-sectional appearances related to the different imaging modalities. Safe and appropriate person centred patient preparation for cross-sectional imaging examinations. Safe cannulation techniques, equipment and patient evaluation. Introduction to pharmacology principles, contrast agents and contra-indications. The environmental safety checks associated with cross-sectional imaging examinations.</p>

Learning Outcomes	
Outcome Number	Description
01	Describe the safe and appropriate person-centred patient preparation for different cross-sectional imaging examinations.
02	Explain the physical principles by the different cross-sectional imaging modalities and the environmental safety factors associated with them.
03	Identify normal cross-sectional anatomy on medical images.
04	Describe correct cannulation selection, technique and potential adverse reactions to contrast agents and other pharmacological agents including the management of complications if they occur.

Learning, Teaching and Assessment Strategy
<p>Keynote lectures will introduce key concepts of cross-sectional imaging technology, safety considerations and preparation of the patient undergoing a variety of examinations. Face to face learning activities will include practical simulations and scenario activities supported by a simulation portfolio and will facilitate demonstration of cannulation techniques, operation of CT and US and the application of safety measures. Facilitated peer discussions and lectures will introduce the fundamental principles of cross-sectional imaging technologies and explore the use of pharmacology and contrast agents within cross-sectional imaging alongside the radiographer's role and responsibilities.</p> <p>Asynchronous directed learning activities will support the development of independent learning skills through reflection and self-assessment of understanding of the learning materials. The reading list and CANVAS VLE materials will support further exploration of the module syllabus to provide learning extension for students.</p> <p>A closed book examination will assess module learning outcomes 1,2,3 and 4. The exam will include short and long answer questions with student optionality in question choice.</p>

Mode of Assessment			
Type	Method	Description	Weighting
Summative	Computerised examination	Short and Long answer questions with student choice	100%
Formative	Computerised examination	Formative simulation portfolio questions and activities. (90 mins)	N/A

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.

