

Module Details	
Module Title	Radiography of the axial skeleton
Module Code	RAD4003-C
Academic Year	2020/1
Credits	30
School	School of Allied Health Professions and Midwifery
Subject Area	Radiography
FHEQ Level	FHEQ Level 4
Pre-requisites	N/A
Co-requisites	N/A

Contact Hours	
Type	Hours
Online Lecture (Synchronous)	15
Online Lecture (Asynchronous)	3
Online Seminar (Synchronous)	7
Learning Objects Interaction	12
Clinical Placement	100
Demonstrations	3
Practical Classes or Workshops	8
Project Supervision	0.5
Directed Study	51
Independent Study	110

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

Module Aims

Students will study the anatomy, physiology, common pathology and radiographic technique (including the role of computed tomography), including patient care, of the axial skeleton and chest and be introduced to the physical concepts of X-ray interactions and image optimisation.

Outline Syllabus

Macroscopic, microscopic and radiographic anatomy, physiology and pathology of the axial skeleton.

Radiographic technique and radiation protection for a comprehensive range of routine radiographic examinations of the axial skeleton.

Introduction to the use of CT; clinical indications; image evaluation.

Patient care and equality of service provision for a diverse population.

Working as part of a health care team.

X-ray interactions; selecting exposure factors and the concept of image optimisation; introduction to image detectors; control of scatter, including grids.

Appropriate use of automatic exposure devices.

Learning Outcomes

Outcome Number	Description
01	Describe normal anatomy, physiology and common pathologies of the axial skeleton
02	Communicate effectively with clinical colleagues and members of the public.
03	Self-assess your personal transferable skills, demonstrate time organisational skills and create an action plan of how you will implement strategies for improvement.
04	Differentiate normal radiographic appearances from common pathologies of the axial skeleton and identify when other imaging modalities would be a more appropriate examination.
05	Describe and perform radiographic technique and appropriate patient care for routine examinations of the axial skeleton.
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06	Explain how X-rays interact with matter; identify different methods of image acquisition and how scattered radiation can be controlled.
07	Recognise common clinical indicators for radiographic examinations of the axial skeleton.
08	Gain informed consent for and perform appropriate routine radiographic examinations of the axial skeleton safely and effectively.
09	Select appropriate equipment and settings for radiographic examinations of the axial skeleton.

Learning, Teaching and Assessment Strategy

Students will achieve the module learning outcomes by following an integrated approach to learning which is undertaken through both academic study and placement learning.

A blended approach to learning will be undertaken.

This will involve some asynchronous lectures which are pre-recorded and will either be timetabled or for the student to watch in their own time. Other sessions will be synchronous whereby lectures are delivered live through an online platform, providing opportunities to ask and receive responses to questions or partake in group discussion.

Tutorials may be performed in the x-ray suite or they may take place online, dependent upon the topic and practical nature of the session's aims.

Online synchronous and asynchronous Lectures: An integrated approach introduces the student to the more complex axial skeleton system and supporting physical principles and technology.

Online Lectures using research informed teaching to deliver team-based learning activities. Activities will explore the topics shown in the outline syllabus and provide students with opportunities for regular feedback on their progress towards achieving the module learning outcomes.

Online Lectures are supported by practical sessions using both the Picture Archiving and Communication System suite and the X-ray suite. Image optimisation, a crucial part of this area of radiography, is studied giving students the opportunity to learn how to use appropriate equipment in the practice setting whilst gaining supervised clinical experience.

Achievement of learning outcomes 1,3, 4, 5 and 7 are assessed using a series of case reports in the personal development e-portfolio, LO 6 in a one hour closed book OSCE examination Portfolio. Learning outcomes 2,4, 8 and 9 are assessed by completion of the semester 2 clinical portfolio.

Mode of Assessment

Type	Method	Description	Length	Weighting
Summative	Computer-based assessment	Completion of answer book (1hr 30 mins)	1 hour 30 mins	30%
Summative	Clinical Assessment	Case study series in ePortfolio	N/A	40%
Summative	Clinical Assessment	Semester 2 paper based clinical portfolio	N/A	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.