

Radiography of the Appendicular Skeleton

Module Code:	RAD4006-C
Academic Year:	2018-19
Credit Rating:	30
School:	School of Allied Health Professions and Midwifery
Subject Area:	Radiography
FHEQ Level:	FHEQ Level 4

Pre-requisites:

Co-requisites:

Contact Hours

Type	Hours
Lectures	38
Practical classes and	6
Clinical Placement	181
Tutorials	16
Directed Study	59

Availability Periods

Occurrence	Location/Period
BDA	University of Bradford / Semester 1 (Sep - Jan)

Module Aims

Anatomy, physiology and radiographic techniques of the upper and lower limbs and introduction to physical concepts of x-rays.

Outline Syllabus

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

Radiographic, anatomical and medical terminology related to the appendicular skeleton.

Radiographic technique and radiation protection for a comprehensive range of routine radiographic examinations of the appendicular skeleton. Patient care, informed consent and

equality of service provision for a diverse population. Working as part of a health care team. Image evaluation.

Introduction to SI units relevant to radiographic studies; exposure factors; the concept of energy; electromagnetic radiation and the electromagnetic spectrum; electricity and magnetism; fundamentals of X-ray production.

Module Learning Outcomes

On successful completion of this module, students will be able to...

- 1
 - 1.1 Describe normal anatomy, physiology and common pathologies of the appendicular skeleton.
 - 1.2 Differentiate normal radiographic appearances from common pathologies of the appendicular skeleton.
 - 1.3 Describe using appropriate terminology the radiographic technique for routine examinations of the appendicular skeleton.
 - 1.4 Use SI units appropriately, understand and explain the nature of electromagnetic radiation and how X-rays are produced including exposure factors.
- 2
 - 2.1 Recognise common clinical indications for radiographic examinations of the appendicular skeleton and chest.
 - 2.2 Gain informed consent for and perform appropriate routine radiographic examinations of the appendicular skeleton and safely and effectively.
 - 2.3 Provide appropriate patient care and understand the need to ensure equality of service provision for a diverse population.
 - 2.4 Evaluate radiographic images of the appendicular skeleton and chest using appropriate terminology.
- 3
 - 3.1 Communicate effectively with clinical colleagues and members of the public.
 - 3.2 Reflect on clinical experiences to benefit future development.

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.

Key lectures which will introduce students to research informed radiographic principles, biological science and radiographic techniques including high quality patient care. These lectures and compulsory tutorials will develop the knowledge outcomes, Practical teaching in the X-ray clinical skills room will develop the subject specific skills and understanding . The topics studied will allow the student to actively participate in X-ray examinations whilst they are at placement. Students will study how x-rays are produced in appropriate depth to enable them to safely and appropriately use x-ray equipment to undertake these examinations.

Assessment of the achievement of learning outcomes 1.1, 1.2, 1.3, 1.4, 2.1 will be undertaken by two computer based examinations. An objective structured clinical examination (OSCE) is delivered by PC. This exam allows an assessment of the full range of knowledge based on medical images and procedures that students will encounter in practice. The second is a MCQ style assessment of the physical sciences. Students` clinical

learning is directed by their Professional Development Portfolio. Clinical learning objectives form part of the portfolio and ensure the students learning is appropriate to the module being studied and enables them to gain formative feedback before assessment of the required learning outcomes 2.2, 2.3, 3.1 and 3.2

Three modes of assessment: computer based OSCE; computer delivered MCQ exam; clinical portfolio.

Mode of Assessment

Type	Method	Description	Length	Weighting	Final Assess'
Summative	Computerised examination	MCQ style examination	60 minutes	30%	Yes
Summative	Computer-based assessment	Objective structured clinical examination (OSCE)	60 minutes	40%	No
Summative	Clinical Assessment	Semester 1 paper based clinical portfolio		30%	No

Legacy Code (if applicable)

Reading List

To view Reading List, please go to [rebus:list](#).