

Higher National Unit Specification

General information for centres

Unit title: General Radiographic Anatomy

Unit code: DW96 34

Unit purpose: This Unit describes those aspects of human anatomy (both normal and abnormal) of particular relevance in radiography. It introduces the radiographic appearance of normal and abnormal human anatomy and the terminology used in its description.

On completion of the Unit the candidate should be able to:

- 1 Describe the gross anatomy of the human body.
- 2 Describe common cells, tissues and body fluids.
- 3 Describe common pathologies of the main body systems.
- 4 Identify normal and abnormal radiographic appearance of human anatomy.

Credit points and level: 1 HN Credit at SCQF level 7: (8 SCQF credit points at SCQF level 7*)

**SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

Recommended prior knowledge and skills: Access to this Unit is at the discretion of the centre.

Core Skills: There are opportunities to develop the Core Skill of Problem Solving at level 5 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

Context for delivery: If this Unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes. This Unit is mandatory in the frameworks for HNC Allied Health Professions: Diagnostic Imaging and HNC Allied Health Professions: Radiotherapy.

Assessment: This Unit should be assessed using an Objective Structured Radiography Examination (OSRE) using oral and/or written questions under controlled conditions. A pass mark of 60% will apply.

Higher National Unit specification: statement of standards

Unit title: General Radiographic Anatomy

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The sections of the Unit stating the Outcomes, knowledge and/or skills, and Evidence Requirements are mandatory.

Where evidence for Outcomes is assessed on a sample basis, the whole of the content listed in the knowledge and/or skills section must be taught and available for assessment. Candidates should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

Outcome 1

Describe the gross anatomy of the human body

Knowledge and/or skills

- ◆ Anatomical terms commonly used in a radiographic environment
- ◆ Basic knowledge of regional, cross-sectional and surface anatomy
- ◆ Anatomical location of major organs in relation to:
 - Vertebral levels
 - Body regions
 - Surface marking

Evidence Requirements

Candidates will need to provide evidence to demonstrate their knowledge and/or skills by showing that they can:

- ◆ apply anatomical terminology to describe regional, cross-sectional and surface anatomy

Candidates must also be able to:

- ◆ demonstrate their anatomical knowledge by locating anatomical structures in relation to vertebral levels, body regions and surface markings

Assessment guidelines

This Unit should be assessed using an Objective Structured Radiography Examination (OSRE) using oral and/or written questions under controlled conditions. A pass mark of 60% will apply.

Higher National Unit specification: statement of standards (cont)

Unit title: General Radiographic Anatomy

Outcome 2

Describe common cells, tissues and body fluids

Knowledge and/or skills

- ◆ Basic structure of the cell
- ◆ Common cell and tissue types
- ◆ Cell cycle
- ◆ Cell specialisation and development
- ◆ Cell changes during carcinogenesis
- ◆ Structure of bone
- ◆ The major body fluids

Evidence Requirements

Candidates will need evidence to demonstrate their knowledge and/or skills by showing that they can:

- ◆ accurately describe the structure and composition of common cells
- ◆ accurately describe the composition and anatomical location of common body fluids

Assessment guidelines

This Unit should be assessed using an Objective Structured Radiography Examination (OSRE) using oral and/or written questions under controlled conditions. A pass mark of 60% will apply.

Outcome 3

Describe the common pathologies of the main body systems

Knowledge and/or skills

- ◆ Brain and spinal cord
- ◆ Skeletal system
- ◆ Lymphatic system
- ◆ Endocrine system
- ◆ Respiratory system
- ◆ Digestive system
- ◆ Hepatic and biliary system
- ◆ Cardiovascular system
- ◆ Urinary and reproductive system
- ◆ Common pathologies

Higher National Unit specification: statement of standards (cont)

Unit title: General Radiographic Anatomy

Evidence Requirements

Candidates will need evidence to demonstrate their knowledge and/or skills by showing that they can:

- ◆ describe the structure, location and anatomical relationships of major organs and body systems

Assessment guidelines

This Unit should be assessed using an Objective Structured Radiography Examination (OSRE) using oral and/or written questions under controlled conditions. A pass mark of 60% will apply.

Outcome 4

Identify normal and abnormal radiographic appearance of the human anatomy

Knowledge and/or skills

- ◆ Basic radiographic appearance of normal human anatomy
- ◆ Basic radiographic appearance of normal skeletal anatomy
- ◆ Introduction to radiographic appearance of abnormal human anatomy
- ◆ Introduction to radiographic appearance of abnormal skeletal anatomy and common fractures
- ◆ Basic normal and abnormal cross sectional radiographic appearance of the human body

Evidence Requirements

Candidates will need evidence to demonstrate their knowledge and/or skills by showing that they can:

- ◆ identify normal radiographic appearance of skeletal anatomy and recognise gross abnormality of radiographic appearance

Candidates should further be able to:

- ◆ recognise basic normal and abnormal appearances of the human body from cross sectional radiographic images

Assessment guidelines

This Unit should be assessed using an Objective Structured Radiography Examination (OSRE) using oral and/or written questions under controlled conditions. A pass mark of 60% will apply.

Administrative Information

Unit code: DW96 34
Unit title: General Radiographic Anatomy
Superclass category: PB
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History of Changes:

Version	Description of change	Date

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Higher National Unit specification: support notes

Unit title: General Radiographic Anatomy

This part of the Unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

Guidance on the content and context for this Unit

It is expected that this Unit will be delivered making on-going reference to the candidates' experiences in clinical settings.

A range of models and other laboratory equipment is available for the teaching of basic anatomy. However care should be taken to relate this to the specialist terminology and practice used in radiography. In Outcomes 3 and 4 in particular reference should be made to case studies and clinical examples. Scans and radiographs should be used with both normal and trauma images.

Useful information to help with Unit can be found at the following websites:

www.sor.org (Society and College of Radiographers)

www.BIR.ac.uk (British Institute of Radiology)

and in the following professional journals:

Synergy
Radiography
Journal of Radiotherapy in Practice
Clinical Oncology
Clinical Radiology

All Outcomes

The candidate should be able to identify a complete overview of the human body using common anatomical terms. Basic cellular description, body fluid and body cavities/systems should be included. Candidates should be introduced to pathology of major organs and structures including common fractures and disease of bones. This Unit should also provide candidates with the opportunity to compare and contrast the radiographic appearance of normal and abnormal human anatomy including cross sectional images

This single credit Unit is designed to introduce anatomy and pathology to assistant practitioners in radiography. The depth of delivery required is also indicated by the notional forty hour time allocation

Higher National Unit specification: support notes (cont)

Unit title: General Radiographic Anatomy

Guidance on the delivery and assessment of this Unit

This Unit should be assessed using an “Objective Structured Radiography Examination” (OSRE) using oral and/or written questions under controlled conditions. A pass mark of 60% will apply.

The Unit will be delivered as a series of interactive lectures, discussions and practical workshops.

Opportunities for developing Core Skills

There are opportunities to develop the Core Skill of Problem Solving at level 5 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

Open learning

For information on normal open learning arrangements, please refer to the SQA guide *Assessment and Quality Assurance and Distance Learning* (SQA 2000).

Candidates with additional support needs

This Unit specification is intended to ensure that there are no artificial barriers to learning or assessment. The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering alternative Outcomes for Units. For information on these, please refer to the SQA document *Guidance on Alternative Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs*, which is available on SQA’s website: www.sqa.org.uk.

General information for candidates

Unit title: General Radiographic Anatomy

Knowledge of the anatomy of the human body in health and during sickness is essential to everyone who works within radiotherapy or radiology. Study of this Unit will enable you to identify basic human anatomy from a radiographic image, to locate internal anatomy from external body surface markings and to understand the relationships between human body systems. You will be encouraged to relate the knowledge you learn in the classroom to the anatomical images you encounter in your own area of clinical practice. This Unit takes a whole systems approach to anatomy, allowing you to gain knowledge of the location, structure and radiographic appearance of organs and tissues and the common pathologies that affect them. You will develop the ability to locate major anatomical structures precisely in relation to vertebral levels and external reference points. A series of imaging modalities will be used to demonstrate the different appearance of anatomical structures dependent upon the investigative method used and the variation in appearance that may result from disease, trauma and other abnormal pathologies.

You will find useful information to help you with Unit at the following websites:

www.sor.org (Society and College of Radiographers)

www.BIR.ac.uk (British Institute of Radiology)

and in the following professional journals:

Synergy
Radiography
Journal of Radiotherapy in Practice
Clinical Oncology
Clinical Radiology