



# MEDI12009 Radiographic Anatomy and Appearances 1

## Term 1 - 2025

Profile information current as at 20/06/2025 02:35 am

All details in this unit profile for MEDI12009 have been officially approved by CQUniversity and represent a learning partnership between the University and you (our student). The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

## General Information

### Overview

This unit is the first of two that examine the relational anatomy of the human body and develop your pattern recognition skills in radiographic appearances of anatomical structures. The focus of this unit is on the musculoskeletal structures of the extremities, shoulder girdle and pelvic girdle. You will apply your knowledge of anatomy, physiology and pathophysiology to studying the development, change through the lifespan and change due to injury and disease of bones and joints in those anatomical regions. For each bone and joint you will study its morphology and spatial characteristics relative to adjacent structures and external landmarks. You will apply that knowledge to building your awareness of radiographic appearances of these structures, including standard appearances, normal variants, injuries and diseases. You will build your vocabulary of radiographic terminology in describing image appearances of anatomical structures and their positional relationships with other structures. You will learn to articulate a reasoned decision in interpreting radiographic appearances at an introductory level.

### Details

Career Level: *Undergraduate*

Unit Level: *Level 2*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

### Pre-requisites or Co-requisites

Prerequisites: BMSC11010 Human Anatomy and Physiology 1 BMSC11011 Human Anatomy and Physiology 2 MEDI11001 Fundamentals of the Imaging Professions MPAT12001 Medical Pathophysiology

Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the [Assessment Policy and Procedure \(Higher Education Coursework\)](#).

### Offerings For Term 1 - 2025

- Mackay

### Attendance Requirements

All on-campus students are expected to attend scheduled classes – in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

### Website

[This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.](#)

## Class and Assessment Overview

### Recommended Student Time Commitment

Each 6-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

### Class Timetable

#### [Regional Campuses](#)

Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

#### [Metropolitan Campuses](#)

Adelaide, Brisbane, Melbourne, Perth, Sydney

### Assessment Overview

#### 1. **In-class Test(s)**

Weighting: 40%

#### 2. **In-class Test(s)**

Weighting: 60%

### Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the [University's Grades and Results Policy](#) for more details of interim results and final grades.

## CQUniversity Policies

**All University policies are available on the [CQUniversity Policy site](#).**

You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure – Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure – International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback – Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the [CQUniversity Policy site](#).

## Unit Learning Outcomes

### **On successful completion of this unit, you will be able to:**

1. Identify on projection radiographs specific anatomical musculoskeletal structures of the upper and lower extremities, shoulder girdle and pelvis
2. Discuss the development, changes through the lifespan and changes due to injuries and diseases of bones and joints of the upper and lower extremities, shoulder girdle and pelvis
3. For each bone and joint of the upper and lower extremities, shoulder girdle and pelvis, describe its morphology and spatial characteristics relative to adjacent structures and surface landmarks
4. Employ standard professional terminology and conventions in describing anatomical features, locations and positional relationships of musculoskeletal structures and in describing radiographic appearances of those structures
5. Apply knowledge of anatomy and pathophysiology and skill in pattern recognition in predicting and interpreting normal and abnormal radiographic appearances of the musculoskeletal structures of the upper and lower extremities, shoulder girdle and pelvis
6. Present a reasoned judgment in predicting and interpreting normal and abnormal radiographic appearances of the musculoskeletal structures of the upper and lower extremities, shoulder girdle and pelvis.

This unit maps to the following components of the Medical Radiation Practice Board of Australia's Professional Capabilities for Medical Radiation Practice:

Domain 1: Medical radiation practitioner: capability 1

Domain 1: Medical radiation practitioner: capability 7
















## Alignment of Learning Outcomes, Assessment and Graduate Attributes

 N/A Level	 Introductory Level	 Intermediate Level	 Graduate Level	 Professional Level	 Advanced Level
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### Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes					
	1	2	3	4	5	6
1 - In-class Test(s) - 40%	•	•	•	•	•	•
2 - In-class Test(s) - 60%	•	•	•	•	•	•

### Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes					
	1	2	3	4	5	6
1 - Communication						
2 - Problem Solving						
3 - Critical Thinking						
4 - Information Literacy						
5 - Team Work						
6 - Information Technology Competence						
7 - Cross Cultural Competence						
8 - Ethical practice						
9 - Social Innovation						
10 - Aboriginal and Torres Strait Islander Cultures						

## Textbooks and Resources

### Textbooks

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#### Prescribed

##### **Accident and Emergency Radiology a Survival Guide**

Edition: 3 (2014)

Authors: Raby, N.; Berman, L.; de Lacey, G.

Elsevier

ISBN: 9780702050312; 0-7020-5031-8

This textbook is available via the e-reading lists on the unit Moodle site. There is no requirement to purchase a physical copy.

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#### Prescribed

##### **Comprehensive Radiographic Pathology**

Edition: 8 (2024)

Authors: Eisenberg, R. L.

Elsevier

ISBN: 9780443119347

This test is available as hard-copy or as an e-book.

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#### Prescribed

##### **Sectional Anatomy for Imaging Professionals e-book**

Edition: 4 (2018)

Authors: Kelley, L.L.; Petersen, C.M.

Mosby

ISBN: 9780323595377

This textbook is available via the e-reading lists on the unit Moodle site. There is no requirement to purchase a physical copy.

### IT Resources

#### **You will need access to the following IT resources:**

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)

## Referencing Style

All submissions for this unit must use the referencing style: [Vancouver](#)

For further information, see the Assessment Tasks.

## Teaching Contacts

**Karen Finlay** Unit Coordinator

[k.finlay@cqu.edu.au](mailto:k.finlay@cqu.edu.au)

## Schedule

### **Week 1 - 10 Mar 2025**

Module/Topic	Chapter	Events and Submissions/Topic

Terminology for radiographic anatomy and appearances	Sectional anatomy for Imaging Professionals, Chapter 1
Osteogenesis and bone remodeling	Comprehensive Radiographic Pathology Chapters 1 & 4 (pp. 86, 90-97 )

#### Week 2 - 17 Mar 2025

Module/Topic	Chapter	Events and Submissions/Topic
Image evaluation Image interpretation Radiographic anatomy and appearances of the fingers and thumb	Sectional Anatomy for Imaging Professionals, pp. 621,630,636-639,646-653 Accident & Emergency A Survival Guide, Chapter 1, Chapter 10 (pp. 154-155) Comprehensive Radiographic Pathology (pp. 131-136)	

#### Week 3 - 24 Mar 2025

Module/Topic	Chapter	Events and Submissions/Topic
Radiographic anatomy and appearances of the hand and wrist	Sectional Anatomy for Imaging Professionals, pp. 621-635, 639-645, 646-651 Accident & Emergency A Survival Guide, Chapters 9 & 10 Comprehensive Radiographic Pathology (pp. 131-136, 137-140)	

#### Week 4 - 31 Mar 2025

Module/Topic	Chapter	Events and Submissions/Topic
Radiographic anatomy and appearances of the forearm, elbow and distal humerus	Sectional Anatomy for Imaging Professionals, pp. 601-621, 646, 650-651 Accident & Emergency A Survival Guide, Chapters 7 & 8	

#### Week 5 - 07 Apr 2025

Module/Topic	Chapter	Events and Submissions/Topic
Radiographic anatomy and appearances of the shoulder girdle	Sectional Anatomy for Imaging Professionals, pp. 563-600, 646 Accident & Emergency A Survival Guide, Chapter 6	

#### Vacation Week - 14 Apr 2025

Module/Topic	Chapter	Events and Submissions/Topic
Vacation week		

#### Week 6 - 21 Apr 2025

Module/Topic	Chapter	Events and Submissions/Topic
Consolidation of the upper limb		<b>In-Class Test</b> Due: Week 6 Thursday (24 Apr 2025) 11:00 am AEST

#### Week 7 - 28 Apr 2025

Module/Topic	Chapter	Events and Submissions/Topic
Radiographic anatomy and appearances of the foot	Sectional Anatomy for Imaging Professionals, pp. 714-745, 747, 753 Accident & Emergency A Survival Guide, Chapter 17	

#### Week 8 - 05 May 2025

Module/Topic	Chapter	Events and Submissions/Topic

Radiographic anatomy and appearances of the ankle and distal tibia and fibula

Sectional Anatomy for Imaging Professionals, pp. 714-745, 747, 753  
Accident & Emergency A Survival Guide, Chapter 16

#### Week 9 - 12 May 2025

Module/Topic	Chapter	Events and Submissions/Topic
Radiographic anatomy and appearances of the proximal tibia and fibula, knee and distal femur	Sectional Anatomy for Imaging Professionals, pp. 682-713, 746-754 Accident & Emergency A Survival Guide, Chapter 15	

#### Week 10 - 19 May 2025

Module/Topic	Chapter	Events and Submissions/Topic
Radiographic anatomy and appearances of the proximal femur and hip joint	Sectional Anatomy for Imaging Professionals, pp. 655-682, 746, 753 Accident & Emergency A Survival Guide, Chapter 14	

#### Week 11 - 26 May 2025

Module/Topic	Chapter	Events and Submissions/Topic
Radiographic anatomy and appearances of the pelvic girdle	Sectional Anatomy for Imaging Professionals, Chapter 8 Accident & Emergency A Survival Guide, Chapter 13	

#### Week 12 - 02 Jun 2025

Module/Topic	Chapter	Events and Submissions/Topic
Consolidation		<b>In-Class test</b> Due: Week 12 Wednesday (4 June 2025) 12:00 pm AEST

#### Review/Exam Week - 09 Jun 2025

Module/Topic	Chapter	Events and Submissions/Topic
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#### Exam Week - 16 Jun 2025

Module/Topic	Chapter	Events and Submissions/Topic
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## Term Specific Information

The unit coordinator for this unit is: Karen Finlay

I can be contacted on k.finlay@cqu.edu.au or 07 4940 7598. During term I may be off campus or teaching other subjects. For this reason the preferred method of initial contact is via email.

As a 6-credit unit you are expected to spend 150 hours throughout the term on this subject. This equates to approximately 12.5 hours per week. It is important to maintain engagement with the content and not fall behind. A suggested time budget is as follows:

Completing pre-reading: 1 - 2 hours per week

Watching recorded lecture presentations and making notes: 3 - 4 hours per week

Preparing for and attending weekly tutorials: 2 hours per week

Preparing for and attending scheduled laboratory classes: 2 hours per week

Preparation for and completion of assessment tasks: 50 hours over the term

## Assessment Tasks

### 1 In-Class Test

#### Assessment Type

In-class Test(s)

### **Task Description**

Radiographers are health professionals who are responsible for imaging human anatomy. As such, they are expected to be able to identify organs and structures in any cross-section and at any level in the body. The relative positions of structures may help to differentiate normal from abnormal body processes. The Medical Radiation practice Board of Australia (MRPBA) requires radiographers to be able to apply knowledge of anatomy, physiology and pathology to practice. In this task you are required to identify, describe and orient structures in the human body using terminology expected of a radiographer. The MRPBA also require radiographers to be able to identify unexpected or urgent findings. The in-class test will assess your ability to interpret medical images for the presence of normal, normal variant or abnormal appearances.

The in-class test will assess your knowledge of the name, location, size, orientation, relative position and morphology of major structures studied from weeks 1 to 5 inclusive, and your use of professional terminology to communicate that knowledge. You will also be assessed on your application of knowledge related to radiographic appearances. Question tasks may include labelling diagrams, responding to multiple-choice, matching and short answer questions, explanations of concepts related to radiographic anatomy and appearances and making judgements on image appearances.

The in-class test will be time-limited, and once you open the test you will not be able to pause or re-start it. Once opened, the test will remain open for 45 minutes and will then automatically close. Any unanswered questions or unsaved responses will receive a mark of zero. The test will be made available via the unit Moodle site. If you start the test late, with less than 45 minutes remaining, the test will close at the scheduled time and you will not have a full 45 minutes in which to complete the test.

You must undertake the test as individuals and not with classmates or others. As with all other University assessments, colluding with other students on a non-group work task is considered academic misconduct and will be dealt with in accordance with the Student Academic Integrity Policy. The test is closed book and no written or electronic information may be brought into the test room. You must not communicate with any other student during the test or communicate any information regarding the test to another student who has not yet sat the test. During the test you may not consult with any other person via any means or accept any input or assistance from any other person, group or artificial intelligence (AI) regarding the test questions and your responses.

In the absence of an approved assessment extension, if you do not complete the test by the stated due date and time, you will receive a mark of zero for this assessment. If you have an approved extension, you will be assigned a new test date and time as soon as possible after the original test date. It is your responsibility to ensure that you can attend at the new assigned date and time. Please see section 5 of the university's Assessment Policy and Procedure for details specifically around assessment extension.

### **Assessment Due Date**

Week 6 Thursday (24 Apr 2025) 11:00 am AEST

### **Return Date to Students**

Results will be released within 2-weeks of all students completing the test, including those with approved extensions.

### **Weighting**

40%

### **Assessment Criteria**

Your responses are scored on the following criteria:

- Correct spelling and use of professional terminology
- Correctness, relevance and completeness of the response to the question asked
- Clarity of responses
- Critical thinking in relation to the topic of the question.

The number of marks for each question are allocated based on the depth and breadth of the required response, and will be indicated on the sidebar of the Moodle test screen.

### **Referencing Style**

- [Vancouver](#)

### **Submission**

Online

### **Learning Outcomes Assessed**



- Identify on projection radiographs specific anatomical musculoskeletal structures of the upper and lower extremities, shoulder girdle and pelvis
- Discuss the development, changes through the lifespan and changes due to injuries and diseases of bones and joints of the upper and lower extremities, shoulder girdle and pelvis
- For each bone and joint of the upper and lower extremities, shoulder girdle and pelvis, describe its morphology and spatial characteristics relative to adjacent structures and surface landmarks
- Employ standard professional terminology and conventions in describing anatomical features, locations and positional relationships of musculoskeletal structures and in describing radiographic appearances of those structures
- Apply knowledge of anatomy and pathophysiology and skill in pattern recognition in predicting and interpreting normal and abnormal radiographic appearances of the musculoskeletal structures of the upper and lower extremities, shoulder girdle and pelvis
- Present a reasoned judgment in predicting and interpreting normal and abnormal radiographic appearances of the musculoskeletal structures of the upper and lower extremities, shoulder girdle and pelvis.

## 2 In-Class test

### Assessment Type

In-class Test(s)

### Task Description

Radiographers are health professionals who are responsible for imaging human anatomy. As such, they are expected to be able to identify organs and structures in any cross-section and at any level in the body. The relative positions of structures may help to differentiate normal from abnormal body processes. The Medical Radiation practice Board of Australia (MRPBA) requires radiographers to be able to apply knowledge of anatomy, physiology and pathology to practice. In this task you are required to identify, describe and orient structures in the human body using terminology expected of a radiographer. The MRPBA also require radiographers to be able to identify unexpected or urgent findings. The in-class test will assess your ability to interpret medical images for the presence of normal, normal variant or abnormal appearances.

The in-class test will assess your knowledge of the name, location, size, orientation, relative position and morphology of major structures studied from all content weeks, and your use of professional terminology to communicate that knowledge. You will also be assessed on your application of knowledge related to radiographic appearances. Question tasks may include labelling diagrams, responding to multiple-choice, matching and short answer questions, explanations of concepts related to radiographic anatomy and appearances and making judgements on image appearances.

The in-class test will be time-limited, and once you open the test you will not be able to pause or re-start it. Once opened, the test will remain open for 60 minutes and will then automatically close. Any unanswered questions or unsaved responses will receive a mark of zero. The test will be made available via the unit Moodle site.

You must undertake the test as individuals and not with classmates or others. As with all other University assessments, colluding with other students on a non-group work task is considered academic misconduct and will be dealt with in accordance with the Student Academic Integrity Policy. The test is closed book and no written or electronic information may be brought into the test room. You must not communicate with any other student during the test or communicate any information regarding the test to another student who has not yet sat the test. During the test you may not consult with any other person via any means or accept any input or assistance from any other person, group or artificial intelligence (AI) regarding the test questions and your responses.

In the absence of an approved assessment extension, if you do not complete the test by the stated due date and time, you will receive a mark of zero for this assessment. If you have an approved extension, you will be assigned a new test date and time as soon as possible after the original test date. It is your responsibility to ensure that you can attend at the new assigned date and time. Please see section 5 of the university's Assessment Policy and Procedure for details specifically around assessment extension.

### Assessment Due Date

Week 12 Wednesday (4 June 2025) 12:00 pm AEST

### Return Date to Students

Results will be released within two-weeks of all students completing the test, including students with approved extensions

### Weighting

60%

**Minimum mark or grade**

50%

**Assessment Criteria**

Your responses are scored on the following criteria:

- Correct spelling and use of professional terminology
- Correctness, relevance and completeness of the response to the question asked
- Clarity of responses
- Critical thinking in relation to the topic of the question.

The number of marks for each question are allocated based on the depth and breadth of the required response, and will be indicated on the sidebar of the Moodle test screen.

**Referencing Style**

- [Vancouver](#)

**Submission**

Online

**Learning Outcomes Assessed**

- Identify on projection radiographs specific anatomical musculoskeletal structures of the upper and lower extremities, shoulder girdle and pelvis
- Discuss the development, changes through the lifespan and changes due to injuries and diseases of bones and joints of the upper and lower extremities, shoulder girdle and pelvis
- For each bone and joint of the upper and lower extremities, shoulder girdle and pelvis, describe its morphology and spatial characteristics relative to adjacent structures and surface landmarks
- Employ standard professional terminology and conventions in describing anatomical features, locations and positional relationships of musculoskeletal structures and in describing radiographic appearances of those structures
- Apply knowledge of anatomy and pathophysiology and skill in pattern recognition in predicting and interpreting normal and abnormal radiographic appearances of the musculoskeletal structures of the upper and lower extremities, shoulder girdle and pelvis
- Present a reasoned judgment in predicting and interpreting normal and abnormal radiographic appearances of the musculoskeletal structures of the upper and lower extremities, shoulder girdle and pelvis.

## Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the [Student Academic Integrity Policy and Procedure](#). This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

### What is a breach of academic integrity?

A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

### Why is academic integrity important?

A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

### Where can I get assistance?

For academic advice and guidance, the [Academic Learning Centre \(ALC\)](#) can support you in becoming confident in completing assessments with integrity and of high standard.

### What can you do to act with integrity?



#### Be Honest

If your assessment task is done by someone else, it would be dishonest of you to claim it as your own



#### Seek Help

If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)



#### Produce Original Work

Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem