



# CHIR20007 Diagnostic Imaging 2

## Term 3 - 2020

Profile information current as at 26/04/2024 03:43 am

All details in this unit profile for CHIR20007 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 a continuation of Diagnostic Imaging 1, and covers pathological processes as represented on diagnostic imaging studies, not covered in Diagnostic Imaging 1.

#### Details

Career Level: *Postgraduate*

Unit Level: *Level 9*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

#### Pre-requisites or Co-requisites

Corequisite: CHIR20006 Clinical Practice 3 Pre-requisite CHIR20005 Diagnostic Imaging 1

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 3 - 2020

- Brisbane
- Mackay
- Sydney

#### 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 Postgraduate 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. **Written Assessment**

Weighting: 20%

#### 2. **Practical Assessment**

Weighting: 40%

#### 3. **Online Quiz(zes)**

Weighting: 40%

### 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](#).

## Previous Student Feedback

### Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

#### Feedback from Have Your Say evaluation

**Feedback**

Students were generally pleased with the relevant unit content and formative activities.

**Recommendation**

Continue to develop and reinforce applicable, relevant unit content and formative activities.

#### Feedback from Have Your Say evaluation

**Feedback**

Some students felt like the amount of content in this unit prevented them from fully internalizing the material.

**Recommendation**

All of the content in this unit is clinically applicable and required pre-clinical knowledge. The unit coordinator could provide time management advice to assist students with dedicating enough time to cover the weekly material.

#### Feedback from Have Your Say evaluation

**Feedback**

Some students felt like the final exam and OSCE were less challenging than they expected, given the amount of content covered in the unit.

**Recommendation**

The unit coordinator will endeavor to create a more challenging experience for the next offering of this unit.

## Unit Learning Outcomes

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

1. Identify the radiographic signs of disease.
2. Differentiate normal from abnormal radiographic structures of the body.
3. Develop and utilise a search strategy to locate and describe disease processes.
4. Create a differential diagnosis list and decide which entity is most likely based on radiographic and clinical information.
5. Select appropriate management for a variety of abnormalities.
6. Write complete and concise radiology reports.

The Learning Outcomes are in the context of the AQF and specifically address Units 6, 7, 8, 9, of the CCEA Competencies, in particular elements 6.1, 6.2, 6.5, 6.6, 7.2, 9.2, 9.3 with an emphasis on elements 6.4, 7.1, 8.3, and 9.10.

## Alignment of Learning Outcomes, Assessment and Graduate Attributes



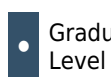
N/A  
Level



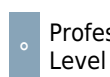
Introductory  
Level



Intermediate  
Level



Graduate  
Level



Professional  
Level



Advanced  
Level

### Alignment of Assessment Tasks to Learning Outcomes

| Assessment Tasks                    | Learning Outcomes |   |   |   |   |   |
|-------------------------------------|-------------------|---|---|---|---|---|
|                                     | 1                 | 2 | 3 | 4 | 5 | 6 |
| <b>1 - Written Assessment - 20%</b> |                   | • | • | • | • | • |

| Assessment Tasks               | Learning Outcomes |   |   |   |   |   |
|--------------------------------|-------------------|---|---|---|---|---|
|                                | 1                 | 2 | 3 | 4 | 5 | 6 |
| 2 - Practical Assessment - 40% | •                 | • | • | • |   |   |
| 3 - Online Quiz(zes) - 40%     |                   |   |   |   | • | • |

### Alignment of Graduate Attributes to Learning Outcomes

| Graduate Attributes                                | Learning Outcomes |   |   |   |   |   |
|--|-------------------|---|---|---|---|---|
|  | 1                 | 2 | 3 | 4 | 5 | 6 |
| 1 - Knowledge                                      |                   |   | ○ | ○ | ○ | ○ |
| 2 - Communication                                  |                   |   | ○ | ○ |   | ○ |
| 3 - Cognitive, technical and creative skills       |                   |   | ○ | ○ | ○ | ○ |
| 4 - Research                                       |                   |   | ○ |   |   |   |
| 5 - Self-management                                |                   |   | ○ | ○ |   | ○ |
| 6 - Ethical and Professional Responsibility        |                   |   |   | ○ |   | ○ |
| 7 - Leadership                                     |                   |   |   | ○ |   |   |
| 8 - Aboriginal and Torres Strait Islander Cultures |                   |   |   |   |   |   |

### Alignment of Assessment Tasks to Graduate Attributes

| Assessment Tasks               | Graduate Attributes |   |   |   |   |   |   |   |
|--------------------------------|---------------------|---|---|---|---|---|---|---|
|                                | 1                   | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 - Written Assessment - 20%   | ○                   |   |   | ○ | ○ |   |   |   |
| 2 - Practical Assessment - 40% | ○                   |   | ○ |   |   | ○ |   |   |
| 3 - Online Quiz(zes) - 40%     | ○                   |   | ○ |   |   | ○ |   |   |

## Textbooks and Resources

### Textbooks

CHIR20007

#### Prescribed

#### Yochum and Rowe's Essentials of Skeletal Radiology

Edition: 3rd (2005)

Authors: Terry R. Yochum and Lindsay J. Rowe

Lippincott, Williams and Wilkins

ISBN: 9780781739467

Binding: Hardcover

[View textbooks at the CQUniversity Bookshop](#)

### IT Resources

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

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

## Referencing Style

No referencing style set.

## Teaching Contacts

**Kristin Grace** Unit Coordinator

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

## Schedule

### Week 1 - 09 Nov 2020

| Module/Topic  | Chapter   | Events and Submissions/Topic |
|---|---|------------------------------|
| Introduction to bone lesions and radiologic predictor variables | All page numbers from Yochum & Rowe's Essentials of Skeletal Radiology, Third Edition<br>Chap. 7, pp. 679-718 |                              |

### Week 2 - 16 Nov 2020

| Module/Topic                      | Chapter   | Events and Submissions/Topic |
|-----------------------------------|---|------------------------------|
| Osseous and Cartilagenous Tumours | Osteoma pp. 1244-1248<br>Bone island/enostoma pp. 1249-1254<br>Osteoid Osteoma/osteoblastoma pp. 1254-1267<br>Osteosarcoma pp. 1184-1194<br>Enchondroma pp. 1267-1279<br>Osteochondroma pp. 1226-1237<br>Chondrosarcoma pp. 1194-1200 |                              |

### Week 3 - 23 Nov 2020

| Module/Topic | Chapter | Events and Submissions/Topic |
|--------------|---------|------------------------------|
|--------------|---------|------------------------------|

Fibrous and Miscellaneous Tumours  
 Fibroxanthoma pp. 1285-1290  
 Fibrosarcoma pp. 1205-1208  
 Giant cell tumor pp. 1220-1226  
 Aneurysmal bone cyst pp. 1295-1299  
 Ewing's sarcoma pp. 1200-1205

**Week 4 - 30 Nov 2020**

| Module/Topic                         | Chapter  | Events and Submissions/Topic                |
|--------------------------------------|--|---|
| Metastasis and Miscellaneous Tumours | Metastatic bone tumours pp. 1137-1168<br>Multiple myeloma pp. 1168-1183<br>Hemangioma pp. 1237-1244<br>Chordoma pp. 1208-1213<br>Paget's disease pp.1302-1331<br>Fibrous dysplasia pp. pp. 1332-1346 | Case report #1 due Friday 4 Dec 2020 @ 9 am |

**Vacation Week - 07 Dec 2020**

| Module/Topic | Chapter | Events and Submissions/Topic |
|--------------|---------|------------------------------|
|--------------|---------|------------------------------|

**Week 5 - 14 Dec 2020**

| Module/Topic        | Chapter               | Events and Submissions/Topic |
|---------------------|-----------------------|------------------------------|
| Trauma Introduction | pp. 793-805 & 929-939 |                              |

**Week 6 - 21 Dec 2020**

| Module/Topic           | Chapter  | Events and Submissions/Topic |
|------------------------|--|------------------------------|
| Trauma Upper Extremity | Shoulder girdle, elbow and forearm, wrist and hand pp. 889-921 |                              |

**Vacation Week - 28 Dec 2020**

| Module/Topic | Chapter | Events and Submissions/Topic |
|--------------|---------|------------------------------|
|--------------|---------|------------------------------|

**Week 7 - 04 Jan 2021**

| Module/Topic           | Chapter                            | Events and Submissions/Topic |
|------------------------|------------------------------------|------------------------------|
| Trauma Lower Extremity | Hip, knee, ankle, foot pp. 858-885 |                              |

**Week 8 - 11 Jan 2021**

| Module/Topic | Chapter     | Events and Submissions/Topic   |
|--------------|-------------|--|
| Trauma Spine | pp. 811-858 | Case Report #2 Due Friday 15 Jan 2020 @ 9 am<br>Viva Cases to be disbursed<br><b>Case Report</b> Due: Week 8 Friday (15 Jan 2021) 9:00 am AEST |

**Week 9 - 18 Jan 2021**

| Module/Topic | Chapter                                    | Events and Submissions/Topic |
|--------------|--|------------------------------|
| Chest Part 1 | Weekly teaching materials posted to Moodle |                              |

**Week 10 - 25 Jan 2021**

| Module/Topic | Chapter                                    | Events and Submissions/Topic |
|--------------|--|------------------------------|
| Chest Part 2 | Weekly teaching materials posted to Moodle |                              |

**Week 11 - 01 Feb 2021**

| Module/Topic | Chapter                                    | Events and Submissions/Topic |
|--------------|--|------------------------------|
| Abdomen      | Weekly teaching materials posted to Moodle |                              |

**Week 12 - 08 Feb 2021**

| Module/Topic | Chapter | Events and Submissions/Topic  |
|--------------|---------|---|
| Review       |         | Practical Assessment<br><b>Practical Assessment</b> Due: Week 12 Friday (12 Feb 2021) 12:00 pm AEST |

**Exam Week - 15 Feb 2021**

| Module/Topic | Chapter | Events and Submissions/Topic   |
|--------------|---------|--|
|              |         | <b>End of Term On-line Assessment</b><br>Due: Exam Week Monday (15 Feb 2021) 11:45 pm AEST |

## Assessment Tasks

### 1 Case Report

**Assessment Type**

Written Assessment

**Task Description**

Radiological reports are an important component of clinical management. It is crucial that chiropractors are able to construct adequate reports on films obtained in their clinics and comprehend terminology contained in reports on images obtained from outside institutions. The student will construct **TWO (2)** detailed radiology reports on separate case images. Instructions for locating the case images will be provided on the Moodle page.

Please note the following details:

- The report itself should not be more than 600 words.
- A template on which the report will be developed is posted on the Moodle site the student will adhere to this template.
- The images do not have to be embedded within the report.
- The two reports will be due at different times. The first report will be due at the end of week 4. The second and final report will be due at the end of week 8.

**Assessment Due Date**

Week 8 Friday (15 Jan 2021) 9:00 am AEST

**Return Date to Students**

Week 10 Friday (29 Jan 2021)

**Weighting**

20%

**Minimum mark or grade**

50%

**Assessment Criteria**

The rubric that will be used to assess the reports can be found below.

| Criteria                    | Proficient  | Competent   | Not yet competent   | Unsatisfactory   |
|-----------------------------|---|---|---|--|
| <b>Grammar and language</b> | <b>3 points</b> All sections were written in complete sentences without any grammatical or spelling errors. | <b>2 points</b> A single section contained grammatical or spelling errors.                        | <b>1 point</b> Two sections contained grammatical or spelling errors                                      | <b>0 points</b> More than two sections contained spelling errors       |
| <b>Study description</b>    | <b>3 points</b> All views correctly identified.   | <b>2 points</b> One view incorrectly identified or omitted.                                       | <b>1 point</b> Two views incorrectly identified or omitted.   | <b>0 points</b> More than two views incorrectly identified or omitted. |
| <b>Organization</b>         | <b>3 points</b> Correct formatting and organization utilizing an ABCS or similar format.                    | <b>2 points</b> A single error formatting of the report has occurred or a single missing section. | <b>1 point</b> Two formatting errors or two missing sections or 1 formatting error and 1 missing section. | <b>0 points</b> More than two formatting errors or missing sections.   |

|                            |  |  |   |  |
|----------------------------|--|--|---|--|
| <b>Pertinent negatives</b> | <b>3 points</b> At least one is used for each section of the ABCS findings.  | <b>2 points</b> Omission of a pertinent negative from one section.             | <b>1 point</b> Two pertinent negatives missing.   | <b>0 points</b> More than two omissions.   |
| <b>Findings</b>            | <b>3 points</b> Findings are clear and accurate with no errors.  | <b>2 points</b> A single omission or an incorrect finding has been offered.    | <b>1 point</b> Two omissions or incorrect findings offered.   | <b>0 points</b> More than two errors.  |
| <b>Impressions</b>         | <b>3 points</b> All findings have an appropriate diagnosis or differential diagnosis.  | <b>2 points</b> A single omission or an incorrect impression has been offered. | <b>1 point</b> Two omissions or incorrect impressions offered.  | <b>0 points</b> More than two errors.  |
| <b>Recommendations</b>     | <b>3 points</b> Are appropriate and include labs, contraindications, and further imaging or referrals, if necessary. Or, omitted if no recommendation necessary. | <b>2.5 points</b> Confused with treatment plan.                                | <b>2 points</b> Offered an unnecessary recommendation or omitted a recommendation which may lead to harmful intervention. | <b>1 point</b> Offered two unnecessary recommendations or omitted two recommendations. |

### Submission

Online

### Submission Instructions

Original images must also be provided in jpeg, bitmap, tiff or dicom format via email, USB or CD

### Learning Outcomes Assessed

- Differentiate normal from abnormal radiographic structures of the body.
- Develop and utilise a search strategy to locate and describe disease processes.
- Create a differential diagnosis list and decide which entity is most likely based on radiographic and clinical information.
- Select appropriate management for a variety of abnormalities.
- Write complete and concise radiology reports.

### Graduate Attributes

- Knowledge
- Research
- Self-management

## 2 Practical Assessment

### Assessment Type

Practical Assessment

### Task Description

Part 1 - OSCE Examination:

20 stations. 2 minutes per station.

Students will review an image set with or without an accompanying history from which they will be required to answer a number of short answer questions. The question bank will include content from the radiology lectures as well as relevant normal radiographic anatomy.

This portion of the assessment will be completed in Week 12 and the time will remain flexible to ensure this assessment does not clash with other lectures/ assessments in Week 12

Part 2 - Viva:

The student will be provided with a set of true diagnostic images reflecting that which may present to a chiropractor. These will be provided to the student in week 8.

A. The student will write a diagnostic imaging report on the image set. This will be complete prior to step B using the standard template for report writing.

B. The student will attend a 15 minute 'one-on-one, in person/online' assessment session and provide a verbal presentation of the report and image set to the lecturer. This assessment will be completed throughout Weeks 9-12. Times will be made available and posted for selection at Week 8.

Marking rubric for this component will be provided on Moodle



These assessments will be held online

**Assessment Due Date**

Week 12 Friday (12 Feb 2021) 12:00 pm AEST

The actual time scheduled for this assessment will be flexible and an agreed time prior to week 12 to ensure this assessment does not clash with other lectures/assessments in week 12.

**Return Date to Students**

Exam Week Friday (19 Feb 2021)

Results will be included in the University release of grades with final examinations and unit grades.

**Weighting**

40%

**Minimum mark or grade**

50%

**Assessment Criteria**

In order to achieve a passing grade or higher, students will be required to demonstrate their competencies in the following areas:

1. Identification of pathologies covered in the course;
2. Apply appropriate terminology to describe the radiographic appearance and diagnosis of pathologies;
3. Demonstrate an understanding of the pathogenesis of the disorders which gives rise to their radiographic appearance;
4. Demonstrate an understanding of the contraindications to manual therapies;
5. Demonstrate an understanding of appropriate referral pathways including GP, Specialist, Advanced Imaging, Pathology.
6. Effectively communicate key radiographic findings and their relationships to clinical information in a simulated clinical environment
7. Student must pass both Part 1 and Part 2 to achieve a pass of this assessment

**Submission**

Online

**Submission Instructions**

The format of this assessment will allow for flexibility dependent on the environment at the time

**Learning Outcomes Assessed**

- Identify the radiographic signs of disease.
- Differentiate normal from abnormal radiographic structures of the body.
- Develop and utilise a search strategy to locate and describe disease processes.
- Create a differential diagnosis list and decide which entity is most likely based on radiographic and clinical information.

**Graduate Attributes**

- Knowledge
- Cognitive, technical and creative skills
- Ethical and Professional Responsibility

### 3 End of Term On-line Assessment

**Assessment Type**

Online Quiz(zes)

**Task Description**

This assessment is to be online. Students will have the option of online or on-campus computer lab invigilation.

In the event of any changes during the term to impact this, we will strive to give you at least 30 days notice. The test will be comprised of a range of question formats, including multi choice, matching, short and long answer explanations.

This is a closed-book assessment and no notes, texts or additional electronic devices are allowed during this assessment task. You will have a 10 minute perusal time prior to the allotted writing time. The test will last for two (2) hours. You will submit your test electronically.

This test must be written at the timetabled date and time. If you arrive late, you may enter the test room up to 15 minutes after the start of the test, however, you will still be required to submit your test at the standard test end time. You will not be allowed entry more than 15 minutes after the test starts. In the absence of an approved extension, there will be no opportunity for you to complete this assessment at a later time, and you will receive a mark of zero for the assessment.

**Number of Quizzes**

1

**Frequency of Quizzes**

Other

**Assessment Due Date**

Exam Week Monday (15 Feb 2021) 11:45 pm AEST

**Return Date to Students**

Exam Week Monday (15 Feb 2021)

**Weighting**

40%

**Minimum mark or grade**

50%

**Assessment Criteria**

In order to achieve a passing grade or higher, students will be required to demonstrate their competencies in the following areas:

1. Identify key principles and findings of pathology that may present on diagnostic imaging studies relevant to Chiropractic practice and their relationship to clinical information.
2. Demonstrate and effectively communicate an understanding of the pathogenesis of disorders that may present on diagnostic imaging studies relevant to Chiropractic practice.
3. Effectively communicate an understanding of referral pathways related to key findings on diagnostic imaging studies and associated clinical information.
4. Demonstrate the ability to appropriately order and interpret imaging relevant to Chiropractic practice.
5. Demonstrate the application of ALARA principles or other guidelines for the use of diagnostic imaging modalities.

**Submission**

Online

**Learning Outcomes Assessed**

- Create a differential diagnosis list and decide which entity is most likely based on radiographic and clinical information.
- Select appropriate management for a variety of abnormalities.

**Graduate Attributes**

- Knowledge
- Cognitive, technical and creative skills
- Ethical and Professional Responsibility

## 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