



CHIR20005 Diagnostic Imaging

Term 2 - 2019

Profile information current as at 21/08/2025 11:53 pm

All details in this unit profile for CHIR20005 have been officially approved by CQU 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 will enable students to identify, interpret and understand skeletal change as represented on conventional radiographs as well as provide an introduction to advanced imaging. These differential diagnostic skills are fundamental for diagnostic competence in chiropractic practice.

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

Co-requisite: CHIR20003 Clinical Practice 2

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 2 - 2019

- Online

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: 50%

3. Examination

Weighting: 30%

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 Student Feedback

Feedback

Some students requested that additional formative activities be created to assist with their learning experience.

Recommendation

It is recommended that the new unit coordinator introduce some regular formative activities to assist students to better understand the content.

Feedback from Student Feedback

Feedback

Many students requested that the week 12 assessment be held in a computer lab.

Recommendation

It is recommended that all week 12 practical assessments be held in a computer lab.

Feedback from Student Feedback

Feedback

Students found the radiology material interesting and relevant to their future careers.

Recommendation

It is recommended that efforts be continued to ensure students are engaged with their radiology training.

Unit Learning Outcomes

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

1. Evaluate radiographs for signs of diseases.
2. Compare normal and abnormal radiographic findings.
3. Implement a search strategy to locate and describe disease processes.
4. Select the appropriate management for a variety of abnormalities.
5. Create a differential diagnosis list in order to arrive at a provisional diagnosis based on radiographic and clinical findings.

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



Alignment of Assessment Tasks to Learning Outcomes

| Assessment Tasks | Learning Outcomes | 1 | 2 | 3 | 4 | 5 |
|---------------------------------------|-------------------|---|---|---|---|---|
| 1 - Written Assessment - 20% | | | | • | | |
| 2 - Practical Assessment - 50% | | • | • | • | • | |

| Assessment Tasks | Learning Outcomes | | | | |
|------------------------------|-------------------|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| 3 - Examination - 30% | | | • | • | |

Alignment of Graduate Attributes to Learning Outcomes

| Graduate Attributes | Learning Outcomes | | | | |
|---|-------------------|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| 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 - 50% | ◦ | ◦ | ◦ | | | ◦ | | |
| 3 - Examination - 30% | ◦ | ◦ | ◦ | | | ◦ | | |

Textbooks and Resources

Textbooks

CHIR20005

Prescribed

Yochum and Rowe's essentials of skeletal radiology

Edition: 3rd (2005)

Authors: Yochum and Rowe

Lippincott, Williams and Wilkins

Binding: Hardcover

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: [American Psychological Association 6th Edition \(APA 6th edition\)](#)

For further information, see the Assessment Tasks.

Teaching Contacts

Kenneth Reckelhoff Unit Coordinator

k.reckelhoff@cqu.edu.au

Schedule

Week 1 - 15 Jul 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|--|---|--|
| Lectures and tutorial: 1. Introduction to normal radiographic anatomy 2. Introduction to joint disease | Reading: 1. Yochum and Rowe 3 rd Edition (Y&R) pp. 1-5 and 12-189 (focus on numbered radiographic and anatomic specimen figures) 2. Y&R Chap. 10 pp. 951-958 | Practical task part A - In-tutorial activity |

Week 2 - 22 Jul 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|--|---|--|
| Lectures and tutorial: 1. Introduction to radiology report writing 2. Degenerative joint disease - extremities | Reading: 1. Y&R Chap. 15 pp. 1547-1578 2. Y&R pp. 958-963 | Practical task part A - In-tutorial activity |

Week 3 - 29 Jul 2019

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

| | | |
|--|---|--|
| Lecture and tutorial: Degenerative joint disease - axial skeleton and disc herniation | Reading: • Y&R pp. 964-999 • Fardon et al. Lumbar disc nomenclature: version 2.0. The Spine Journal 14 (2014) 2525-2545 | Practical task part A - In-tutorial activity |
|--|---|--|

Week 4 - 05 Aug 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|--|--|--|
| Lecture and tutorial: Inflammatory arthritis - Rheumatoid Arthritis | Reading: • Y&R Chap. 10 pp. 1010-1033 | Practical task part A - In-tutorial activity |

Week 5 - 12 Aug 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|--|--|
| Lecture and tutorial: Other Inflammatory arthritides | Reading: • Y&R Chap. 10 pp. 988-989, 999-1005, 1006-1010, 1071-1075 1084 - 1109 | Practical task part A - In-tutorial activity |

Vacation Week - 19 Aug 2019

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

Week 6 - 26 Aug 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|--|---|
| Lecture and tutorial: Seronegative spondyloarthropathies | Reading: • Y&R Chap. 10 pp. 1033-1068 | Practical task part A - In-tutorial activity Written Assignment - Report due Reports Due: Week 6 Friday (30 Aug 2019) 6:00 pm AEST |

Week 7 - 02 Sep 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|--|--|--|
| Lecture and tutorial: Metabolic disorders | Reading: • Y&R pp. 1497-1510, 1517-1523 | Practical task part A - In-tutorial activity |

Week 8 - 09 Sep 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|--|--|--|
| Lecture and tutorial: Endocrine disorders | Reading: • Y&R pp. 1523-1531, 1511-1516 | Practical task part A - In-tutorial activity |

Week 9 - 16 Sep 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|---------------------------------|--|
| Lecture and tutorial: Bone and joint infection | Reading: • Y&R pp. 1386-1417 | Practical task part A - In-tutorial activity |

Week 10 - 23 Sep 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|---|--|
| Lecture and tutorial: Vascular disorders | Reading: • Y&R pp. 1435-1440, 1427-1435, 1444-1453 | Practical task part A - In-tutorial activity |

Week 11 - 30 Sep 2019

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

| | | |
|--|---|---|
| Lecture and tutorial: Dysplasias | Reading: • Y&R Chap. 8 pp. 721-727, 756-761, 765-774, 776-777 | Practical task part A - In-tutorial activity |
| Week 12 - 07 Oct 2019 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| Lecture and tutorial: Spondylolisthesis and Scoliosis | Reading: • Y&R Chap. 5 | Practical task part A - In-tutorial activity Practical Assessment - Friday 1:00pm computer lab to be announced |
| Practical Tasks Due: Week 12 Friday (11 Oct 2019) 11:59 pm AEST | | |
| Review/Exam Week - 14 Oct 2019 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| Exam Week - 21 Oct 2019 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |

Assessment Tasks

1 Reports

Assessment Type

Written Assessment

Task Description

You will need to write a 1000 word assignment that compares and contrasts the clinical presentation, aetiology, pathological features (including laboratory tests) and conventional radiographic appearance of one of the following three choices:

1. DISH vs ankylosing spondylitis

2. DJD vs rheumatoid arthritis in the hand

3. Osteoporosis vs osteomalacia

It is acceptable to complete this assignment in a table format. It is expected that you will use appropriate recent (last 10 years) and relevant references to support your discussion and claims. Failure to use high quality references will negatively impact your scores.

A few older references may be acceptable if they are pertinent and of high quality.

Assessment Due Date

Week 6 Friday (30 Aug 2019) 6:00 pm AEST

Online submission

Return Date to Students

Week 8 Friday (13 Sept 2019)

Grades and feedback will be returned via Moodle.

Weighting

20%

Minimum mark or grade

50%

Assessment Criteria

You will have demonstrated an ability to

1. Provide appropriate evidence of the typical clinical presentation of both disorders and discuss their similarities and differences
2. Provide accurate information on the aetiologies of both disorders and discuss their commonalities and differences
3. Provide relevant information on the pathological features including appropriate use of laboratory investigations of both disorders and discuss their commonalities and differences
4. Identify the radiographic features of both disorders and discuss their similarities and differences. Include appropriate terminology and any specific features which assist in the diagnosis. Include common skeletal sites of involvement, classic radiographic signs, and other relevant radiographic features.

Pictures, images and/or diagrams should be used to support your content.

Table format is acceptable.

Use at least 5 references from which you sourced your information (not including lecture notes). Use the APA Referencing system.

A marking rubric will be provided at the beginning of term on Moodle.

Referencing Style

- [American Psychological Association 6th Edition \(APA 6th edition\)](#)

Submission

Online

Learning Outcomes Assessed

- Select the appropriate management for a variety of abnormalities.

Graduate Attributes

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

2 Practical Tasks

Assessment Type

Practical Assessment

Task Description**Part A - 10%**

Weekly Tutorial Activity - this will involve a range of interactive activities with the tutor including question writing, report writing, film identifications, and topical literature discussions. These activities will require you to upload an item to the weekly forum and be available to discuss the task at the weekly tutorial. All tasks will be posted on Moodle at the beginning of term. In order to receive a passing grade you must successfully participate (to be clear this means posting

the weekly tutorial activity to the forum and attending the weekly zoom tutorial) in 80% (i.e. 10 out of the 12 tutorials) of the weekly tutorial activities.

Part B - 40%

OSCE Examination

25 Stations 2 minutes per station

Students will be required to review an image with or without an accompanying history, from which they will be required to answer a number of short answer questions. This will take place in an on-campus computer lab.

Assessment Due Date

Week 12 Friday (11 Oct 2019) 11:59 pm AEST

Assessment will be continuous throughout the term for Part A, however the final part B practical assessment will take place during week 12 a time will be decided no later than week 6.

Return Date to Students

Exam Week Monday (21 Oct 2019)

Students will be informed of their grades via Moodle.

Weighting

50%

Minimum mark or grade

80% for part A and 50% for part B

Assessment Criteria

Part A (10% of available 50%)

In order to achieve a passing grade or higher, students must complete 80% (10 out of the 12) the weekly activities which includes attending the online tutorials.

1. Demonstrate ability to use appropriate radiological terminologies.
2. Demonstrate ability to write a radiology report using professional communication skills.
3. Apply knowledge and skills to identify and determine normal and abnormal radiographic findings.
4. Engage with new literature and pose questions for clarification

Part B (40% of the available 50%)

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

1. Identification of pathologies covered in the unit and provide diagnoses, prognoses and investigations required.
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 contraindications to manual therapies.
5. Demonstrate an understanding of appropriate referral including GP, Specialist, Advanced Imaging, Pathology.

Referencing Style

- [American Psychological Association 6th Edition \(APA 6th edition\)](#)

Submission

Online

Learning Outcomes Assessed

- Evaluate radiographs for signs of diseases.
- Compare normal and abnormal radiographic findings.
- Implement a search strategy to locate and describe disease processes.
- Create a differential diagnosis list in order to arrive at a provisional diagnosis based on radiographic and clinical findings.

Graduate Attributes

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

Examination

Outline

Complete an invigilated examination.

Date

During the examination period at a CQUniversity examination centre.

Weighting

30%

Length

120 minutes

Minimum mark or grade

50%

Exam Conditions

Closed Book.

Materials

Dictionary - non-electronic, concise, direct translation only (dictionary must not contain any notes or comments).

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