



CHIR20005 *Diagnostic Imaging*

Term 2 - 2020

Profile information current as at 26/08/2025 08:56 am

All details in this unit profile for CHIR20005 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

In this unit, you will learn to identify, interpret and understand skeletal change as represented on conventional radiographs as well as advanced imaging such as computed tomography (CT) and magnetic resonance imaging (MRI). 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 - 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. **On-campus Activity**

Weighting: Pass/Fail

2. **Written Assessment**

Weighting: 20%

3. **Written Assessment**

Weighting: 30%

4. **Online Quiz(zes)**

Weighting: 50%

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 evaluation and email correspondence.

Feedback

Some students would have preferred for the weekly content to be uploaded earlier.

Recommendation

It is recommended that unit material be made available on Moodle a minimum of two weeks in advance.

Feedback from Student evaluation and personal communication.

Feedback

Some students felt that they would have benefited from a stronger understanding of normal radiographic anatomy before being introduced to more advanced radiological pathologies.

Recommendation

It is recommended that the unit coordinator should investigate the opportunity to include more normal radiographic anatomy in the early weeks of the unit.

Feedback from Student evaluation.

Feedback

Students indicated that some of the learning resources could be more engaging.

Recommendation

It is recommended that the unit coordinator will explore ways to increase the way in which students can engage with the content.

Feedback from Student evaluation.

Feedback

Many students found this subject area very interesting and appreciated the relevance it will have to their future careers.

Recommendation

The unit coordinator should continue to share authentic case studies that reinforce the relevance of radiology in chiropractic practice.

Unit Learning Outcomes

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

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

Learning outcome 1 - Competency 3 (3.3 and 3.5)

Learning outcome 2 - Competency 3 (3.5)

Learning outcome 3 - Competency 1 (1.3), 3 (3.3, 3.5)

Learning outcome 4 - Competency 1 (1.3), 4 (4.1, 4.2, 4.3)

Learning outcome 5 - Competency 3 (3.5)

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 - Online Quiz(zes) - 50%	•	•	•		•
3 - Written Assessment - 30%				•	•
4 - On-campus Activity - 0%		•	•		

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 - Online Quiz(zes) - 50%	○	○	○			○		
3 - Written Assessment - 30%	○	○	○			○		
4 - On-campus Activity - 0%			○					

Textbooks and Resources

Textbooks

CHIR20005

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

Additional Textbook Information

If you prefer to study with a paper copy, they are available at the CQUni Bookshop here: <http://bookshop.cqu.edu.au> (search on the Unit code). eBooks are available at the publisher's website.

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 7th Edition \(APA 7th edition\)](#)

For further information, see the Assessment Tasks.

Teaching Contacts

Kenneth Reckelhoff Unit Coordinator

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Dawn Dane Unit Coordinator

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Schedule

Week 1 - 13 Jul 2020

Module/Topic	Chapter	Events and Submissions/Topic
Lectures and tutorial: 1. Role of imaging 2. Introduction to radiologic interpretation of arthritis	Reading: 1. Intro to report writing guided reading, see workbook on Moodle. 2. Yochum and Rowe 3 rd Edition (Y&R) Chap. 10 pp. 951-958	Tutorial activity submitted prior to tutorial.

Week 2 - 20 Jul 2020

Module/Topic	Chapter	Events and Submissions/Topic
Lectures and tutorial: Degenerative joint disease - extremities	Reading: 1. Y&R pp. 958-963	Tutorial activity and practice case report submitted prior to tutorial.

Week 3 - 27 Jul 2020

Module/Topic	Chapter	Events and Submissions/Topic
Lecture and tutorial: Degenerative arthritis of the spine and related conditions.	Reading: • Y&R pp. 963-977, 990-998, 998-999 • Fardon et al. Lumbar disc nomenclature: version 2.0. The Spine Journal 14 (2014) 2525-2545	Tutorial activity submitted prior to tutorial.

Week 4 - 03 Aug 2020

Module/Topic	Chapter	Events and Submissions/Topic
Lecture and tutorial: Autoimmune/inflammatory arthropathies	Reading: • Y&R Chap. 10 pp. 1010-1033, 988-989	Tutorial activity and practice case report submitted prior to tutorial.

Week 5 - 10 Aug 2020

Module/Topic	Chapter	Events and Submissions/Topic
Lecture and tutorial: Scoliosis and spondylolisthesis	Reading: • Y&R Chap. 4, pp. 405-424.	Tutorial activity and practice case report submitted prior to tutorial.

Vacation Week - 17 Aug 2020

Module/Topic	Chapter	Events and Submissions/Topic

Week 6 - 24 Aug 2020

Module/Topic	Chapter	Events and Submissions/Topic
Lecture and tutorial: Seronegative spondyloarthropathies	Reading: • Y&R Chap. 10 pp. 1033-1068	Tutorial activity submitted prior to tutorial. Written Assignment - Report due Written Assessment Due: Week 6 Friday (28 Aug 2020) 11:59 pm AEST

Week 7 - 31 Aug 2020

Module/Topic	Chapter	Events and Submissions/Topic
Lecture and tutorial: Metabolic conditions affecting the musculoskeletal system	Reading: • Y&R pp. 1497-1510, 1517-1523	Tutorial activity and practice case report submitted prior to tutorial.

Week 8 - 07 Sep 2020

Module/Topic	Chapter	Events and Submissions/Topic
Lecture and tutorial: Metabolic (crystalline deposition) and atypical degenerative arthropathy	Reading: • Y&R pp. 1084-1092, 1092-1099, 1099-1109, 1006-1010, 999-1005	Tutorial activity submitted prior to tutorial.

Week 9 - 14 Sep 2020

Module/Topic	Chapter	Events and Submissions/Topic
Lecture and tutorial: Bone and joint infection	Reading: • Y&R pp. 1386-1417	Tutorial activity and practice case report submitted prior to tutorial.

Week 10 - 21 Sep 2020

Module/Topic	Chapter	Events and Submissions/Topic
Lecture and tutorial: Hematologic/vascular disorders of the skeleton	Reading: • Y&R pp. 1427-1435, 1435-1440, 1444-1453	Tutorial activity and practice case report submitted prior to tutorial.

Week 11 - 28 Sep 2020

Module/Topic	Chapter	Events and Submissions/Topic
Lecture and tutorial: Skeletal dysplasias and normal variants	Reading: • Y&R Chap. 8 pp. 721-727, 756-761, 765-774, 776-777	Tutorial activity and practice case report submitted prior to tutorial.
Week 12 - 05 Oct 2020		
Module/Topic	Chapter	Events and Submissions/Topic
Lecture and tutorial: Review	Reading: Review	Tutorial activity submitted prior to tutorial. Practical Assessment (in-person in on-campus computer lab). Date TBD.
Review/Exam Week - 12 Oct 2020		
Module/Topic	Chapter	Events and Submissions/Topic
Exam Week - 19 Oct 2020		
Module/Topic	Chapter	Events and Submissions/Topic

Assessment Tasks

1 Tutorial activity submission

Assessment Type

On-campus Activity

Task Description

Weekly Tutorial Activity - this will involve a range of interactive activities with the tutor including 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.

Assessment Due Date

The completed activities are due continuously, in each individual week, on Thursday by 3 pm. This enables the unit coordinator to review the submissions prior to the tutorial, which will be on Friday.

Return Date to Students

Weighting

Pass/Fail

Assessment Criteria

The following learning outcomes will be assessed with this activity:

1. Identify normal and abnormal radiographic findings.
2. Implement a search strategy to locate and describe disease processes.

Referencing Style

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

Submission

Online

Learning Outcomes Assessed

- Identify normal and abnormal radiographic findings
- Implement a search strategy to locate and describe disease processes

Graduate Attributes

- Cognitive, technical and creative skills

2 Written Assessment

Assessment Type

Written Assessment

Task Description

Using Chapter 3 in the course textbook (Yochum and Rowe, 3rd Edition), select **ONE (1)** congenital anomaly or normal skeletal variant from each of **FIVE (5)** different body regions (cervical, thoracic, lumbar, wrist, etc) and locate at least one image that is representative of each chosen condition. The images, at the time of selection, must be free of all annotations (except side markers). Next, using any software of your choice that has image editing capability, annotate (using arrows, colour overlays, etc.) your **FIVE (5)** chosen images to depict the imaging findings and include a caption that describes the findings. Lastly, describe whether each of the conditions that you have chosen would cause you to either alter the usual, expected mode of chiropractic care (manipulation, rehabilitative exercise, passive modalities, etc) or necessitate referral to another specialist for a consultation. A thorough rationale must be provided for this description. You may utilize more than one image to depict each condition (e.g. an AP and lateral view). At the very minimum, you will submit **FIVE (5)** annotated images each with a caption and description with rationale of alterations of care or referral. Appropriate, recent references (within 15 years) should support your description and rationale.

Assessment Due Date

Week 6 Friday (28 Aug 2020) 11:59 pm AEST

Return Date to Students

Week 8 Friday (11 Sept 2020)

Weighting

20%

Minimum mark or grade

50%

Assessment Criteria

A rubric and exemplar will be made available within the first week of the term. This assessment will cover the following learning outcomes:

1. Evaluate radiographs for signs of diseases.
2. Select the appropriate management strategy for a variety of clinical and imaging abnormalities

Referencing Style

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

Submission

Online

Learning Outcomes Assessed

- Evaluate radiographs for signs of diseases.
- Select the appropriate management strategy for a variety of clinical and imaging abnormalities

Graduate Attributes

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

3 Written Assessment

Assessment Type

Written Assessment

Task Description

This is the end-of-term written examination which will take place in the exam period. It will consist of a variety of question styles such as short-answer, essay and extended matching (excluding multiple choice). More information will

be made available within the first few weeks of the term.

Assessment Due Date

The written examinations will be held in the usual exam week and students will be notified of the scheduled date within the term..

Return Date to Students

Weighting

30%

Minimum mark or grade

50%

Assessment Criteria

This assessment will cover the following learning outcomes:

1. Identify normal and abnormal radiographic findings.
2. Select the appropriate management strategy for a variety of clinical and imaging abnormalities.
3. Create a differential diagnosis list in order to arrive at a provisional diagnosis based on radiographic and clinical findings.

Referencing Style

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

Submission

Offline

Learning Outcomes Assessed

- Select the appropriate management strategy for a variety of clinical and imaging abnormalities
- 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

4 Objective Structured Practical Examination (OSPE)

Assessment Type

Online Quiz(zes)

Task Description

This is the end-of-term practical assessment which will take place in the 12th week. This will be held in an on-campus computer lab. The exam will consist of 25 stations with two questions 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.

Number of Quizzes

Frequency of Quizzes

Other

Assessment Due Date

This will take place during week 12 at a time that is decided no later than week 6.

Return Date to Students

Weighting

50%

Minimum mark or grade

50%

Assessment Criteria

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 7th Edition \(APA 7th edition\)](#)

Submission

Online

Learning Outcomes Assessed

- Evaluate radiographs for signs of diseases.
- Identify 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

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