



CHIR20005 *Diagnostic Imaging*

Term 2 - 2021

Profile information current as at 26/05/2022 08:23 pm

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 - 2021

- Brisbane
- 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 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: 40%

2. **Practical Assessment**

Weighting: 30%

3. **Oral Examination**

Weighting: 30%

4. **Case Study**

Weighting: Pass/Fail

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

Feedback

The application of the content to authentic case scenarios assisted students to engage with the content.

Recommendation

It is recommended that case based learning continue to be used to assist students to engage with the unit content.

Feedback from Have Your Say

Feedback

The approachability and responsiveness of the unit coordinator was appreciated by many students. They felt their feedback was appreciated and used to improve their experience.

Recommendation

It is recommended that all unit coordinators remain approachable and respond to feedback to provide a positive learning experience.

Feedback from Have Your Say

Feedback

The quality of the lectures and the assessment tasks provided a strong learning environment.

Recommendation

It is recommended that lectures and assessments always be developed to a high standard.

Unit Learning Outcomes

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

1. Implement a search strategy to identify and evaluate normal findings, abnormal changes and disease processes on radiographs
2. Create a differential diagnosis list in order to arrive at a provisional diagnosis based on radiographic and clinical findings
3. Select the appropriate management strategy for a variety of clinical and imaging abnormalities
4. Develop radiology report writing skills

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

Learning outcome 2 - Competency 3 (3.5)

Learning outcome 3 - Competency 1 (1.3), 4 (4.1, 4.2, 4.3)

Learning outcome 4 - Competency 1 (1.1) 2 (2.4), 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
1 - Written Assessment - 40%		•	•	•

Assessment Tasks	Learning Outcomes			
	1	2	3	4
2 - Practical Assessment - 30%	•		•	
3 - Oral Examination - 30%	•	•		
4 - Case Study - 0%				•

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes			
	1	2	3	4
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 - 40%	○	○	○	○		○		
2 - Practical Assessment - 30%	○	○	○			○		
3 - Oral Examination - 30%	○	○	○			○		
4 - Case Study - 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

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

Kristin Grace Unit Coordinator

k.grace@cqu.edu.au

Schedule

Week 1 - Introduction to Diagnostic Imaging and Radiographic Interpretation - 12 Jul 2021

Module/Topic	Chapter	Events and Submissions/Topic
Lectures and tutorial: <ul style="list-style-type: none">• Role of imaging• Introduction to radiographic interpretation• Introduction to radiographic report writing	Reading: <ul style="list-style-type: none">• Yochum and Rowe 3rd Edition (Y&R) Chap. 15:<ul style="list-style-type: none">• General considerations p. 1547• Report structure and content p. 1551-4 NOT past Report Variations for CT and MRI (this will not be addressed),• Risk Management Strategies in Interpretation and Report Writing p. 1556-8• Second opinion Specialty Radiology Reviews p. 1558-9• Case Study 1-5 p. 1560-1569	

Week 2 - Scoliosis and Spondylolithesis - 19 Jul 2021

Module/Topic	Chapter	Events and Submissions/Topic
Lectures and tutorial: Scoliosis and Spondylolithesis	Reading: 1. Y&R Chap. 4 & Chap. 5	

Week 3 - Introduction to Arthropathies and Extra-axial Degenerative Arthropathies - 26 Jul 2021

Module/Topic	Chapter	Events and Submissions/Topic
Lecture and tutorial: Degenerative joint disease - extremities	Reading: • Y&R pp. 955-962; 977-987	

Week 4 - Axial Degenerative Arthropathies - 02 Aug 2021

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	

Week 5 - Inflammatory/ Autoimmune Arthropathies - 09 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
Lecture and tutorial: Autoimmune/inflammatory arthropathies	Reading: • Y&R Chap. 10 pp. 1010-1033, 988-989	

Vacation Week - 16 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic

Week 6 - Seronegative Spondyloarthropathies - 23 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
Lecture and tutorial: Seronegative spondyloarthropathies	Reading: • Y&R Chap. 10 pp. 1033-1068	Reporting Cases 1-3 Due Monday 23 August 11:59pm

Week 7 - Crystalline Deposition and Atypical Degenerative Arthropathies - 30 Aug 2021

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	

Week 8 - Metabolic Conditions affecting the Musculoskeletal System - 06 Sep 2021

Module/Topic	Chapter	Events and Submissions/Topic
Lecture and tutorial: Metabolic conditions affecting the musculoskeletal system	Reading: • Y&R pp. 1497-1510, 1517-1523	

Week 9 - Bone and Joint Infection - 13 Sep 2021

Module/Topic	Chapter	Events and Submissions/Topic
Lecture and tutorial: Bone and joint infection	Reading: • Y&R pp. 1386-1417	Oral Interpretations Begin - Times will be allocated prior

Week 10 - Haematologic / Vascular Disorder of the Skeleton - 20 Sep 2021

Module/Topic	Chapter	Events and Submissions/Topic
Lecture and tutorial: Haematologic/vascular disorders of the skeleton	Reading: • Y&R pp. 1427-1435, 1435-1440, 1444-1453	

Week 11 - Skeletal Dysplasias and Normal Variants - 27 Sep 2021

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	

Week 12 - 04 Oct 2021

Module/Topic	Chapter	Events and Submissions/Topic

Reporting Cases 4-6 Due Monday 04
October 11:59pm

Lecture and tutorial:
Review

Reading:
Review

**End of Term Practical Assessment
- Case Based OSCE** Due: Week 12
Wednesday (6 Oct 2021) 9:00 am
AEST
**Viva/ Oral Interpretation and
Presentation** Due: Week 12 Friday (8
Oct 2021) 11:45 pm AEST
Written Case Reports Due: Week 12
Friday (8 Oct 2021) 11:45 pm AEST

Review/Exam Week - 11 Oct 2021

Module/Topic	Chapter	Events and Submissions/Topic
		End of Term Written Theory Assessment Due: Review/Exam Week Monday (11 Oct 2021) 2:00 pm AEST

Exam Week - 18 Oct 2021

Module/Topic	Chapter	Events and Submissions/Topic
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Assessment Tasks

1 End of Term Written Theory Assessment

Assessment Type

Written Assessment

Task Description

This assessment is to be online. 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.

Assessment Due Date

Review/Exam Week Monday (11 Oct 2021) 2:00 pm AEST

Return Date to Students

Exam Week Monday (18 Oct 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.

Referencing Style

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

Submission

Online

Learning Outcomes Assessed

- Create a differential diagnosis list in order to arrive at a provisional diagnosis based on radiographic and clinical findings
- Select the appropriate management strategy for a variety of clinical and imaging abnormalities
- Develop radiology report writing skills

Graduate Attributes

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

2 End of Term Practical Assessment - Case Based OSCE

Assessment Type

Practical Assessment

Task Description

Students will review a series of image sets with or without an accompanying history from which they will be required to identify and abnormality, diagnose a condition or abnormality or answer a number of associated short answer questions. The clinical cases will align with 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

Assessment Due Date

Week 12 Wednesday (6 Oct 2021) 9:00 am AEST

Online

Return Date to Students

Review/Exam Week Wednesday (13 Oct 2021)

Weighting

30%

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. Accurately identify pathologies covered in the course;
2. Apply appropriate terminology to describe the radiographic appearance and diagnosis of pathologies;
3. Demonstrate an understanding of appropriate referral pathways including GP, Specialist, Advanced Imaging, Pathology.
4. Effectively communicate key radiographic findings and their relationships to clinical information in a simulated clinical environment

Referencing Style

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

Submission

Online

Learning Outcomes Assessed

- Implement a search strategy to identify and evaluate normal findings, abnormal changes and disease processes on radiographs
- Select the appropriate management strategy for a variety of clinical and imaging abnormalities

Graduate Attributes

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

3 Viva/ Oral Interpretation and Presentation

Assessment Type

Oral Examination

Task Description

The student will be provided with 2 diagnostic imaging cases reflecting that which may present to a chiropractor. These will be chosen randomly and will represent those conditions presented during the term

The student will attend a 15 minute 'one-on-one, in person/online' assessment session and provide a verbal interpretation of the above cases 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 (8 Oct 2021) 11:45 pm AEST

**These will take place between Weeks 9-12. Times will be made available in Week 8

Return Date to Students

Exam Week Wednesday (20 Oct 2021)

Weighting

30%

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 normal radiographic anatomy
2. Identify pathologies covered in the course;
3. Apply appropriate terminology to describe the radiographic appearance and diagnosis of pathologies;
4. Effectively communicate key radiographic findings and their relationships to clinical information in a simulated clinical environment
5. Demonstrate an understanding of the contraindications to manual therapies;
6. Demonstrate an understanding of referral pathways including GP, Specialist, Advanced Imaging, Pathology where appropriate.

Referencing Style

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

Submission

No submission method provided.

Learning Outcomes Assessed

- Implement a search strategy to identify and evaluate normal findings, abnormal changes and disease processes on radiographs
- 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 Written Case Reports

Assessment Type

Case Study

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 provided. The student will construct Six (6) 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 be in the format presented in the course.
- Adhere to the template posted on Moodle
- 3 reports will be due by the end of week 6 and the remaining 3 reports will be due by the end of Week 12

This is a pass/ fail component and ALL reports must be turned in to pass. Feedback will be provided during discussion of the case in tutorial and a Model report will be uploaded following week 6 and week 12

Assessment Due Date

Week 12 Friday (8 Oct 2021) 11:45 pm AEST

Return Date to Students

Exam Week Wednesday (20 Oct 2021)

Weighting

Pass/Fail

Minimum mark or grade

100% complete

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 mechanics of radiographic report writing
4. Effectively communicate key radiographic findings and their relationships to clinical information in a simulated clinical environment
5. Demonstrate an understanding of appropriate referral pathways including GP, Specialist, Advanced Imaging, Pathology.

Referencing Style

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

Submission

Online

Learning Outcomes Assessed

- Develop radiology report writing skills

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