



MEDI11001 *Fundamentals of the Imaging Professions*

Term 2 - 2019

Profile information current as at 26/04/2024 01:53 pm

All details in this unit profile for MEDI11001 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.

Corrections

General Information

Overview

This unit is the first step in your journey as a student medical radiation practitioner. The principle aim of this unit is to provide you with an introduction to the field of Medical Imaging and associated medical radiations professions. The theoretical and laboratory content of this unit enables you to develop the knowledge and skills to perform safely and professionally within your scope of practice.

Details

Career Level: *Undergraduate*

Unit Level: *Level 1*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

Enrollment in CG92 Bachelor of Medical Imaging course.

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

- Mackay
- Mixed Mode

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).

Residential Schools

This unit has a Compulsory Residential School for distance mode students and the details are:

Click here to see your [Residential School Timetable](#).

Website

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

Class and Assessment Overview

Recommended Student Time Commitment

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

Class Timetable

[Regional Campuses](#)

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

[Metropolitan Campuses](#)

Adelaide, Brisbane, Melbourne, Perth, Sydney

Assessment Overview

1. **Online Test**

Weighting: 20%

2. **Laboratory/Practical**

Weighting: 20%

3. **Examination**

Weighting: 60%

Assessment Grading

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

CQUniversity Policies

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

You may wish to view these policies:

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

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

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 comments during learning activities, student feedback.

Feedback

Students greatly enjoyed the hands-on nature of the residential school and internal labs and appreciated the ability to put theory to practice.

Recommendation

Maintain the lab component of the unit to build introductory skills and knowledge in radiographic equipment and performance of imaging examinations.

Feedback from Instructional team observations

Feedback

The unit includes content that overlaps to some degree with other units in the course.

Recommendation

Review the content of this and other Year 1 units to reduce overlap.

Unit Learning Outcomes

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

1. Discuss the responsibilities, role and scope of practice of medical radiation practitioners, particularly in the contexts of professional, medico-legal and regulatory frameworks
2. Discuss the Australian healthcare system and the provision of diagnostic imaging services within it
3. Discuss the scientific and humanistic aspects of the various diagnostic and therapeutic branches of the medical radiation sciences
4. Discuss learning strategies and professional attributes that enable student health professionals to learn and operate effectively within the culture of the clinical workplace
5. Apply basic concepts of radiation science and instrumentation to radiographic imaging.

This unit links at an introductory level to the following professional capabilities of the medical radiation practitioner as detailed by the Medical Radiation Practice Board of Australia:

- Domain 1: Professional and Ethical Conduct - Parts 1, 2 and 3
- Domain 3: Evidence-based Practice and Professional Learning - Part 2
- Domain 4: Radiation Safety and Risk Management - Parts 1, 4 and 5
- Domain 5: Practice in Medical Radiation Science - Parts 2, 3 and 4
- Domain 5A: Practice in Diagnostic Radiography - Parts 1 to 6

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 - Online Test - 20%	•				•

Assessment Tasks	Learning Outcomes				
	1	2	3	4	5
2 - Laboratory/Practical - 20%				•	•
3 - Examination - 60%	•	•	•	•	

Alignment of Graduate Attributes to Learning Outcomes

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

Alignment of Assessment Tasks to Graduate Attributes

Assessment Tasks	Graduate Attributes									
	1	2	3	4	5	6	7	8	9	10
1 - Online Test - 20%	•	•						•		
2 - Laboratory/Practical - 20%	•	•	•			•				
3 - Examination - 60%	•		•					•		

Textbooks and Resources

Textbooks

There are no required textbooks.

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: [Harvard \(author-date\)](#)
For further information, see the Assessment Tasks.

Teaching Contacts

Linden Williams Unit Coordinator
l.williams@cqu.edu.au

Schedule

Week 1 - 15 Jul 2019

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to the Medical Imaging Professions <ul style="list-style-type: none">• overview• radiation safety	See Moodle unit resources and links	Tutorial

Week 2 - 22 Jul 2019

Module/Topic	Chapter	Events and Submissions/Topic
Fundamentals of x-ray production <ul style="list-style-type: none">• x-ray production• radiographic equipment	See Moodle unit resources and links	No tutorial Lab 1 for internal students

Week 3 - 29 Jul 2019

Module/Topic	Chapter	Events and Submissions/Topic
Fundamentals of x-ray imaging <ul style="list-style-type: none">• aspects of image quality• controls of image appearances	See Moodle unit resources and links	Tutorial Lab 2 for internal students

Week 4 - 05 Aug 2019

Module/Topic	Chapter	Events and Submissions/Topic
Fundamentals of the imaging procedure <ul style="list-style-type: none">• imaging workflow - referrals, RIS and PACS• radiographic examination• fundamental principles of clinical radiography	See Moodle unit resources and links	Tutorial Lab 3 for internal students

Week 5 - 12 Aug 2019

Module/Topic	Chapter	Events and Submissions/Topic
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The clinical environment <ul style="list-style-type: none"> • the medical imaging team • radiographer role • scope of practice • clinical learning environment 	See Moodle unit resources and links	Tutorial Lab 4 for internal students
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Vacation Week - 19 Aug 2019

Module/Topic	Chapter	Events and Submissions/Topic
Break Week		

Week 6 - 26 Aug 2019

Module/Topic	Chapter	Events and Submissions/Topic
Being a student radiographer <ul style="list-style-type: none"> • being an adult learner • assessing performance • giving and receiving feedback • reflection on practice 	See Moodle unit resources and links	Tutorial Lab 5 for internal students Online Test Due: Week 6 Tuesday (27 Aug 2019) 5:00 pm AEST

Week 7 - 02 Sep 2019

Module/Topic	Chapter	Events and Submissions/Topic
Regulation of Medical Radiation Practice <ul style="list-style-type: none"> • MRPBA • Radiation Use and Licencing - being safe and legal 	See Moodle unit resources and links	Tutorial Lab 6 for internal students

Week 8 - 09 Sep 2019

Module/Topic	Chapter	Events and Submissions/Topic
Res School		Residential School 'A' at Mackay Ooralea campus for external students 13/9/19-14/9/19 (attendance required at one res school only, either A or B)

Week 9 - 16 Sep 2019

Module/Topic	Chapter	Events and Submissions/Topic
Beyond the radiograph - other imaging modalities and medical radiation professions <ul style="list-style-type: none"> • Advanced radiography - fluoroscopy and CT • MRI • Sonography • Nuclear medicine • Radiation therapy 	See Moodle unit resources and links	Tutorial The content listed here will take 2 weeks of study, to complete during Weeks 8-10. Due to the residential schools, you have been given the flexibility of when to work through the material.

Week 10 - 23 Sep 2019

Module/Topic	Chapter	Events and Submissions/Topic
Res school		Residential School 'B' at Mackay Ooralea campus for external students 27/9/19-28/9/19 (attendance required at one res school only, either A or B)

Week 11 - 30 Sep 2019

Module/Topic	Chapter	Events and Submissions/Topic
The big picture - The provision of diagnostic imaging within the Australian Healthcare System	See Moodle unit resources and links	Tutorial

Week 12 - 07 Oct 2019

Module/Topic	Chapter	Events and Submissions/Topic
Revision week		Tutorial

Review/Exam Week - 14 Oct 2019

Module/Topic	Chapter	Events and Submissions/Topic
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Exam Week - 21 Oct 2019

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

I'm Linden Williams, your Unit Coordinator for MEDI11001. I am based at the Ooralea campus in Mackay and am looking forward to working with you through this unit. My office phone number is (07) 4940 7817. However, I am best contacted by email at l.williams@cqu.edu.au and I aim to respond to email correspondence within 2 working days.

MEDI11001 is a 6-credit point unit, which means you should plan to spend about 10-12 hours per week studying the unit content. For each week, a suggested breakdown of your time would be:

- Watching recorded lectures: 2 hours
- Weekly readings and guided learning activities in Moodle: 3-4 hours
- Making your own notes based on the weekly learning goals: 2 hours
- Tutorial: 1 hour
- Assessment completion & study: 2 hours

In addition to this, you will spend 9 hours in labs (or res school for the external students) during the term and additional study time for your exam.

The lab activities provide you with an opportunity to work with the radiographic imaging equipment and apply the theory concepts covered in the unit. They are also an essential component for completing the Lab Workbook assessment. Labs are timetabled weekly in weeks 2-7 for students studying internally, and during the residential school for external students. There are two residential schools on offer, Res School A in Week 8, 12:30pm 13/9/19 - 5pm 14/9/19 and Res School B in Week 10, 5pm 27/9/19 - 4:30pm 28/9/19. External students only need to attend one of these res schools. When attending lab sessions, you will be required to adhere to all occupational health and safety requirements related to the use of the Medical Imaging laboratories, including completion of the mandatory radiation safety and lab induction prior to your first session. You are required to adhere to the Medical Imaging Dress Code for all practical lab sessions.

Tutorials are interactive sessions where your participation enables you to check your understanding of and your ability to apply the week's concepts. Your regular participation strongly supports your success in the unit. While online tutorials will be recorded, these recordings are not intended to replace your active participation in live sessions. As a student in this unit, you are part of a learning community that will be home to you for the next few years. I encourage you to be an active participant and to connect with your classmates. Head to the Moodle site regularly. Use the Moodle forums regularly. Participate in tutorials, whether on campus or by Zoom. Enjoy your learning journey!

Assessment Tasks

1 Online Test

Assessment Type

Online Test

Task Description

You will complete an online test in Week 6 to demonstrate your understanding and ability to apply the concepts and use the terminology from Weeks 1 - 5 (inclusive).

- All questions will be based on the posted weekly learning goals. The questions may include short answer responses, calculations, explanations and discussions and may include analysis of radiographs and diagrams from tutorials.
- The test will be 40 marks. The number of marks for each question are allocated based on the depth and breadth of the required response, and will be indicated on the test.
- Once the test is accessed, it will remain open for 60 minutes.

The online test will be available from **Week 6 Monday (26 August 2019) at 8:00am AEST until Week 6 Tuesday (27 August 2019) at 5:00pm AEST**. You must log into Moodle during this time period to complete the test. You can

only attempt the online test once and it must be completed in a single session. You cannot save your answers and return to the test at a later time.

This assessment is to be undertaken as an individual. As with all other university assessment, colluding with other students on non-group work tasks is considered academic misconduct. Inserting answers from other websites at the time of the online test is considered plagiarism. The online test is an open book assessment. However, you must remain mindful of the time you are taking to answer each question and have an understanding of the content and also familiarity with your resources to use them effectively.

Please note: It is your responsibility to log on to Moodle and complete the online test during the time the test is available. You **MUST** start the test before 4:00pm (AEST) on Tuesday 27th August 2019 as the test automatically closes at 5pm (AEST). In the absence of an approved extension there can be no late penalty applied and you will receive a score of zero for this assessment.

Assessment Due Date

Week 6 Tuesday (27 Aug 2019) 5:00 pm AEST

The online test is open from 8:00am AEST 26/8/19 until 5:00pm AEST 27/8/19. Once the test is accessed it remains open for 60 minutes. Only one attempt is allowed.

Return Date to Students

Week 8 Friday (13 Sept 2019)

Weighting

20%

Assessment Criteria

Question responses will be scored on the following criteria:

- correct use of terminology
- correct selection and application of core concepts to the specific content of the question
- clarity, correctness, relevance and completeness of the response in addressing the question that was asked

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online

Submission Instructions

You must log in to Moodle to complete the Online Test (a link can be found in the 'Online Test' block on Moodle). Once you have completed the Online Test, you must click the 'Submit' button to submit your responses.

Learning Outcomes Assessed

- Discuss the responsibilities, role and scope of practice of medical radiation practitioners, particularly in the contexts of professional, medico-legal and regulatory frameworks
- Apply basic concepts of radiation science and instrumentation to radiographic imaging.

Graduate Attributes

- Communication
- Problem Solving
- Ethical practice

2 Lab Workbook

Assessment Type

Laboratory/Practical

Task Description

The labs provide you with an opportunity to work with the radiographic imaging equipment, applying the theory concepts covered in the unit. You will complete the lab activities in the weekly timetabled lab sessions if you are an internal student, or during residential school if you are studying externally. This assessment task is based on the activities completed during these lab sessions. You will be provided with a workbook (in Moodle) to record your observations and measurements from the lab activities. The workbook will also have some questions relating to each lab activity that will require you to discuss your findings with respect to the unit content.

Workbook requirements:

- Use the workbook provided in Moodle and submit as a Word document.
- There is no word limit but a suggested size is approximately 1500 words.
- You may include photos, images and diagrams from the labs. Ensure that any diagrams and images are properly labelled and linked to the content. All externally sourced images and/or diagrams must be acknowledged using the Harvard system. Avoid images and diagrams with very large file sizes as they will cause submission issues when you are uploading your portfolio on the unit Moodle site.
- Note that although you will work with classmates to acquire the data used in your portfolio, the written component is an individual task and must be your own work. You must use data that you have personally obtained during the lab activity.

To complete the workbook, it will be essential for you to attend labs. These are timetabled weekly in weeks 2-7 for students studying internally, and during the residential school for external students. If you do not attend labs, you will not have the required observations to complete the workbook. In the absence of an approved extension there will be no opportunity to 'catch-up' on missed labs and you will be unable to complete sections of the workbook which may result in a 'Fail' grade for this assessment item.

Assessment Due Date

The workbook is due by 11:45pm (AEST) two weeks after the completion of your last lab activity. For internal students Monday Week 9 (16/9/19). Res school A students Monday Week 11 (30/9/19). Res school B students Monday Week 13 (14/10/19).

Return Date to Students

Exam Week Friday (25 Oct 2019)

Weighting

20%

Minimum mark or grade

50%

Assessment Criteria

The workbook is assessed on the following criteria:

- completeness of all sections of the workbook
- factual correctness of stated observations and unit content
- application of unit content in describing and discussing lab activities
- depth and breadth of responses to discuss and explain questions
- use of professional terminology
- clarity of communication

The scoring rubric and further information will be available on the unit Moodle site

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online

Learning Outcomes Assessed

- Discuss learning strategies and professional attributes that enable student health professionals to learn and operate effectively within the culture of the clinical workplace
- Apply basic concepts of radiation science and instrumentation to radiographic imaging.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Technology Competence

Examination

Outline

Complete an invigilated examination.

Date

During the examination period at a CQUniversity examination centre.

Weighting

60%

Length

180 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).

No calculators permitted

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