MEDI11001 *Fundamentals of the Imaging Professions*

Term 2 - 2021

Profile information current as at 27/04/2024 09:37 am

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.

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 - 2021

- 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: 15%
2. **Laboratory/Practical**
Weighting: 25%
3. **Online Test**
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 feedback and unit coordinator reflection.

Feedback
The residential school and associated lab workbook assessment support the online learning.

Recommendation
Continue with labs and residential school.

Feedback from Student feedback and unit coordinator reflection.

Feedback
The tutorial questions are useful for tutorial participation and revision.

Recommendation
Continue to publish tutorial questions in Moodle prior to tutorial date.

Feedback from Student feedback

Feedback
The lab workbook assessment has a low weighting for the work involved.

Recommendation
Re-evaluate assessment item weightings so that they represented the time input, and the effort involved.

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

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
1 - Online Test - 15%	•				•
2 - Laboratory/Practical - 25%				•	•
3 - Online Test - 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 - 15%	•	•						•		
2 - Laboratory/Practical - 25%	•	•	•			•				
3 - Online Test - 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 - 12 Jul 2021

Module/Topic	Chapter	Events and Submissions/Topic
Learning the Profession • role of the radiographer • being an adult learner	See Moodle unit resources and links	One hour tutorial

Week 2 - 19 Jul 2021

Module/Topic	Chapter	Events and Submissions/Topic
Fundamentals of x-ray production • radiation • x-ray production • radiographic equipment • working safely with x-ray producing equipment	See Moodle unit resources and links	One hour tutorial

Week 3 - 26 Jul 2021

Module/Topic	Chapter	Events and Submissions/Topic
Fundamentals of the x-ray image • x-ray image formation • aspects of image quality • controls of image appearances	See Moodle unit resources and links	One hour tutorial

Week 4 - 02 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
Fundamentals of the imaging procedure • imaging workflow - referrals, RIS and PACS • radiographic examination	See Moodle unit resources and links	One hour tutorial

Week 5 - 09 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
The clinical environment • the medical imaging team • scope of practice • communication • professional boundaries	See Moodle unit resources and links	**Mid-term Online Test:** Wednesday 11 August 2021 (to be completed between 8am and 8pm AEST) One hour tutorial

Vacation Week - 16 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
Break Week		

Week 6 - 23 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
Regulation of Medical Radiation Practice • Registration • MRPBA Professional Capabilities • Radiation Use and Licensing - being safe and legal	See Moodle unit resources and links	One hour tutorial

Week 7 - 30 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
The clinical placement experience • expectations and responsibilities • assessing performance • giving and receiving feedback • reflection on practice	See Moodle unit resources and links	One hour tutorial

Weeks 8-10 - 06 Sep 2021

Module/Topic	Chapter	Events and Submissions/Topic
Beyond the radiograph - other imaging modalities and medical radiation professions • Advanced radiography - fluoroscopy and CT • MRI • Sonography • Nuclear medicine • Radiation therapy	See Moodle unit resources and links	• This content will take 2 weeks of study, to complete during Weeks 8-10. • One hour tutorial in both Weeks 8 & 10. • Residential School in Week 8 or 9 for mixed mode students only.

Week 11 - 27 Sep 2021

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	

Week 12 - 04 Oct 2021

Module/Topic	Chapter	Events and Submissions/Topic
Consolidation of knowledge		One hour tutorial

Review/Exam Week - 11 Oct 2021

Module/Topic	Chapter	Events and Submissions/Topic
		End of term online test - date and time to be advised

Exam Week - 18 Oct 2021

Module/Topic	Chapter	Events and Submissions/Topic
		End of term online test - date and time to be advised

Term Specific Information

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: 2-4 hours
- Making your own notes based on the weekly learning goals: 2 hours
- Tutorial preparation and attendance: 1.5 hours

These times are a guide and will vary each week depending on the weekly content. They will also vary throughout term depending on scheduled activities and assessments, such as labs/res school attendance, completion of the lab workbook assessment and revision for the online tests.

Lab activities provide you with an opportunity to observe and work with the radiographic imaging equipment, applying the theory concepts covered in the unit and developing skills that will be required for Year 2 study. These activities are also an essential component for completing the Lab Workbook assessment. The lab activities are timetabled throughout term for Mackay students and during a Residential School for mixed-mode students. There are three Residential school options and you only need to attend one:

- Week 8 Friday 10th September
- Week 9 Wednesday 15th September
- Week 9 Friday 17th September

When attending residential school 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 and res school. Course uniform shirts need to be ordered several weeks in advance through the University bookshop https://bookshop.cqu.edu.au/details.asp?ITEMNO=1110000098262

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 and discussions. Enjoy your learning journey!

Assessment Tasks

1 Mid-term Online Test

Assessment Type
Online Test

Task Description
You will complete an online test in Week 5 to demonstrate your understanding and ability to apply the concepts and use the terminology from Weeks 1 - 4 (inclusive).

- All questions will be based on the posted weekly learning goals. The question types may include multiple choice, matching terms, labelling diagrams, fill-in-the-gap and short written responses. Question tasks may include definitions, analysis of radiographs/photographs/diagrams/referrals, explanations and discussions.
- 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.

The online test will be available on Wednesday of Week 5 (11 August 2021) from 8:00am AEST to 8pm AEST. You must log into Moodle during this time period to complete the test. Once the test is started it will remain open for 60 minutes. No responses can be entered after 8pm (so you should make sure you start the test before 7pm). 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.

Your test responses must be your own work. The rules of academic integrity still apply. Colluding with other students on non-group work is considered academic misconduct. You may not communicate with any other person

during the test (whether verbally, electronically or in writing) for any purpose relating to the test questions or your responses. You may not share the test content with any other person for any reason. At the start of the test you will need to make a declaration that you understand these rules of academic integrity and that you agree to abide by them. Any identified cases of potential collusion will result in a breach of academic integrity case being raised.

This online test is an open book assessment. It means that during the test you may access your study notes, textbook, the unit Moodle site and/or any website. However, the expectation is that you will be familiar with the unit content and concepts. You should not assume you will have time to look up the answer to every question.

It is your responsibility to log on to Moodle and complete the online test during the time the test is available. There is no opportunity to apply a late penalty. In the absence of an approved extension, you cannot complete this assessment at a later time, and you will receive a mark of zero for the assessment if you have not completed it by the scheduled date and time. If you have an approved extension, you will be assigned a new test date and time as soon as possible after the original test date. It is your responsibility to ensure that you can attend at that new assigned date/time. Please see Section 5 of the University's Assessment Policy and Procedure for details regarding Assessment Management, specifically around assessment extension.

Assessment Due Date

The online test is only available on Wednesday 11 August 2021 from 8:00am AEST to 8:00pm AEST. Once the test is accessed it remains open for 60 minutes. Responses cannot be entered after 8pm. Only one attempt is allowed.

Return Date to Students
Week 6 Wednesday (25 Aug 2021)

Weighting
15%

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

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 Attendance & Workbook

Assessment Type
Laboratory/Practical

Task Description
The labs provide you with an opportunity to observe and work with the radiographic imaging equipment, applying the theory concepts covered in the unit. The lab activities will enable you to develop beginner level psychomotor skills in the use of professional equipment and occupational health and safety practices that will be required knowledge for Year 2 study.

You will need to attend all labs to be able to fully complete the lab workbook. If you are studying as an internal student in Mackay, you must register to attend one of the weekly lab classes that run from Weeks 2-6. If you are studying by mixed mode, you must register for one of the available one-day residential schools. While there are sufficient spaces in internal labs and residential school classes for all students enrolled in each mode of study, space is limited for each

timetabled option to support effective small group learning. You are encouraged to register early so that you can arrange personal commitments in order to attend your session(s).

You will be provided with a workbook (in Moodle) to complete for this assessment based on the activities you will complete during the labs or residential school.
Workbook requirements:

- Complete the workbook provided in Moodle and submit as a Word document.
- There is no word limit but a suggested size is approximately 1000-1500 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 may cause submission issues when you are uploading your portfolio on the unit Moodle site.
- Although you will work with classmates during res school to acquire some of 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 activities.

To complete the workbook, it will be essential for you to attend your timetabled labs or residential school. In the absence of an approved extension there will be no opportunity to 'catch-up' on missed lab activities and you will be unable to complete sections of the workbook which may result in a Fail grade for this assessment item. 'Catch-up' lab sessions cannot be provided and an extension can only be approved if there are available places in an existing lab class or res school and you have a valid reason for your absence with supporting documentation (as outlined in the Assessment Policy and Procedure).

For all lab and residential school sessions, you are required to wear the Medical Imaging clinical uniform and wear shoes that meet Occupational Health and Safety requirements. You will also need to complete all inductions prior to your first lab session. You will not be allowed into the labs without meeting both requirements.

Assessment Due Date

The lab workbook will be due by 5pm AEST two weeks after the date of your last lab or residential school. For example, if you attend res school on 15th September, your lab workbook will be due by 5pm 29th September.

Return Date to Students
Review/Exam Week Monday (11 Oct 2021)

Weighting
25%

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

A detailed 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

3 End of term Online Test

Assessment Type
Online Test

Task Description
You will complete an online test at the end of term to demonstrate your understanding and ability to apply the concepts and use the terminology from all weeks of the unit excepting Weeks 2 and 3.

- All questions will be based on the posted weekly learning goals. The question types may include multiple choice, matching terms, labeling diagrams, fill-in-the-gap and written responses. Question tasks may include definitions, analysis of photographs/diagrams/referrals, explanations and discussions.
- The test will be out of 60 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.

This test will be scheduled during the University Exam period. The time and date will be advised in due course through the unit Moodle page. You must log into Moodle to complete the test. You will have 120 minutes 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.

Your test responses must be your own work. The rules of academic integrity still apply. You cannot seek assistance or make use of assistance from another person during this test. You may not communicate with any other person during the test (whether verbally, electronically or in writing) for any purpose relating to the test questions or your responses. You may not share the test content with any other person for any reason. At the start of the test you will need to make a declaration that you understand these rules of academic integrity and that you agree to abide by them. Any identified cases of potential collusion will result in a breach of academic integrity case being raised. Just as for written assignments, you must also acknowledge intellectual content in your answers that is not your own work. Basic statements of facts are considered 'common knowledge' in the context of this unit so they do not need to be cited. However, if you copy any explanation content word-for-word from ANY source, you must put that content in quotation marks and formally cite your source.

This online test is an open book assessment. However, the expectation is that you will be familiar with the unit content and concepts. You should not assume you will have time to look up the answer to every question.

It is your responsibility to log on to Moodle and complete the online test during the time the test is available. There is no opportunity to apply a late penalty. In the absence of an approved extension, you cannot complete this assessment at a later time, and you will receive a mark of zero for the assessment if you have not completed it by the scheduled date and time. If you have an approved extension, you will be assigned a new test date and time as soon as possible after the original test date. It is your responsibility to ensure that you can attend at that new assigned date/time. Please see Section 5 of the University's Assessment Policy and Procedure for details regarding Assessment Management, specifically around assessment extension.

Assessment Due Date

During the University Exam period - date and time to be advised in Moodle

Return Date to Students

Certification of grades

Weighting
60%

Minimum mark or grade
50%

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

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
- Discuss the Australian healthcare system and the provision of diagnostic imaging services within it
- Discuss the scientific and humanistic aspects of the various diagnostic and therapeutic branches of the medical radiation sciences
- Discuss learning strategies and professional attributes that enable student health professionals to learn and operate effectively within the culture of the clinical workplace

Graduate Attributes

- Communication
- Critical Thinking
- Ethical practice

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