

## MRSC4080: MRS Advanced and Future Practice

Callaghan

Semester 1 - 2024



THE UNIVERSITY OF  
NEWCASTLE  
AUSTRALIA

## OVERVIEW

### Course Description

Medical Radiation Science undergoes constant and rapid technologic and procedural change, and to ensure adequacy for future practice there is a need for students to develop learning and evaluative strategies to assess the utility of emerging professional practice roles, clinical procedures, technology, patient assessment, and assess the outcomes from medical imaging and radiation therapy. This course provides students with the skills required to complete a comprehensive review of the literature and an opportunity to engage their interest by examining advanced, emerging and future approaches to medical radiation science.

### Requisites

Students must be active in Bachelor of Medical Radiation Science (Honours) (**Diagnostic Radiography**), and have successfully completed MRSC3155 and MRSC3160, OR

Students must be active in Bachelor of Medical Radiation Science (Honours) (**Radiation Therapy**), and have successfully completed MRSC3260 and MRSC3270, OR

Students must be active in Bachelor of Medical Radiation Science (Honours) (**Nuclear Medicine**), and have successfully completed MRSC3355 and MRSC3380.

### Contact Hours

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#### Online Activity

Online

2 hour(s) per week(s) for 9 week(s)

#### Workshop \*

Face to Face On Campus (Zoom & recorded)

3 hour(s) per week(s) for 3 week(s) (dates and times provided via online Timetable and on Canvas and below.)

Workshop 1: Friday 29 March, 10am-1pm (**to be rescheduled as Friday 29 March is Good Friday – you will be notified via Canvas.**)

Workshop 2: Friday 12 April, 10am-1pm

Workshop 3: Friday 17 May, 10am-1pm

NB: This class is scheduled in **EFG02**, I will delivering the teaching out of this room however, I will use Zoom as the teaching platform. You may attend face to face in EFG02 or attend via Zoom (links are provided in Canvas and will be emailed to you also).

# COURSE OUTLINE

[www.newcastle.edu.au](http://www.newcastle.edu.au)

CRICOS Provider 00109J

**Unit Weighting**  
**Workload**

\* This contact type has a compulsory requirement.  
10  
Students are required to spend on average 120-140 hours of effort (contact and non-contact) including assessments per 10-unit course.

## CONTACTS

**Course Coordinator**

**Callaghan**

Associate Professor Yolanda Surjan  
[Yolanda.Surjan@newcastle.edu.au](mailto:Yolanda.Surjan@newcastle.edu.au)  
(02) 492 17850

Consultation:

- Zoom drop-in sessions Wednesdays 12-1pm (see Zoom link in Canvas, drop in if you have questions/need support, starts Week 3 – Wednesday 12<sup>th</sup> March through to 29 May)
- Email for appointment (face to face or Zoom)
- Responses to emails will be received within 24 hours.

**Teaching Staff**

Other teaching staff will be advised on the course Canvas site.

**School Office**

**School of Health Sciences**

Room 302, ICT Building  
Callaghan  
SchoolHealthSciences@newcastle.edu.au  
+61 2 4921 7053

## SYLLABUS

**Course Content**

The content of this course is aligned yearly to the emerging practices and technologies within Medical Radiation Science. These changes are constant and rapid and the content of this course changes as practice changes. Examples of the content of this course include issues related to:

- Advanced and emerging Anatomical and Functional Imaging
- Advanced and emerging Radiation Therapy imaging and treatment options
- Skills related to undertaking a review of literature relevant to a chosen topic and write up of outcomes of the review.

**Course Learning**  
**Outcomes**

**On successful completion of this course, students will be able to:**

1. Search, critically analyse, evaluate and synthesise relevant scientific literature on a chosen topic of interest and develop a review document demonstrating advanced writing skills and an appreciation for past, present and future practice in MRS (Diagnostic Radiography, Nuclear Medicine, or Radiation Therapy).
2. Critically examine the utility of emerging and future practice methods in Diagnostic Radiography, Nuclear Medicine, or Radiation Therapy.
3. Analyse the basis for better patient management or outcomes through advanced practice.
4. Identify and engage professional and academic interest in researching and reviewing emerging practice.
5. Engage in discussion, and debate topics, with other students through online work activities.
6. Communicate understanding and learning in a way that is creative and engaging and captures the interest they have in their work.

## Course Materials

Learning materials for this Course are located in the MRSC4080 Canvas site.

## COMPULSORY REQUIREMENTS

In order to pass this course, each student must complete ALL of the following compulsory requirements:

Contact Hour Requirements:

- Workshops: There is a compulsory attendance requirement in this Course. Students must attend the Workshops and engage with the learning activities and assessments.

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Course Assessment Requirements:

- Written Assignment/s, Forums: students must attempt/submit this assessment item.
- A final mark of 50% or above must be achieved by students in order to pass the Course.

## ASSESSMENTS

This course has 3 Assessments. Each assessment is described in more detail in the sections below (and in the [Assessment Guidelines Document](#) found in Canvas).

	Assessment Name	Due Date	Involvement	Weighting	Learning Outcomes
1	Online Discussion (x2)	Students are to engage in the discussion over a 2-week period. <b>(Discussion 1)</b> Starting Monday 18 <sup>th</sup> March, 8am. <b>(Discussion 2)</b> Starting Monday 6 <sup>th</sup> May, 8am. See Table below <b>Discussions close:</b> Week 6: Monday 1 <sup>st</sup> April, 4pm. Week 11: Monday 20 <sup>th</sup> May, 4pm.	Individual	30% Total (15% Discussion 1) (15% Discussion 2)	2, 3, 4
2	Written Assignment* PART A	Wednesday 3 <sup>rd</sup> April, 4pm.	Individual	20%	1, 2, 3, 4
3	Written Assignment* PART B	Monday <b>May 27<sup>th</sup></b> , 4pm.	Individual	50%	1, 2, 3, 4,6

Discussion 1	
<b>Opens</b>	<b>Closes</b>
Week 4: Monday <b>March 18</b> – 8am	Week 6: Monday <b>April 1</b> , 4pm
Discussion 2	
<b>Opens</b>	<b>Closes</b>
Week 9: Monday <b>May 6</b> – 8am	Week 11: Monday <b>May 20</b> , 4pm

Students are expected to complete the initial discussion post in the **first open week** and at least another post in the **second week**, *responding to another students' initial post*.

\* This assessment has a compulsory requirement.

<b>Late Submissions</b>	The mark for an assessment item submitted after the designated time on the due date, without an approved extension of time, will be reduced by 10% of the possible maximum mark for that
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	assessment item for each day or part day that the assessment item is late. Note: this applies equally to week and weekend days.
Reminder	1) <i>Reusing one's own work, or part thereof, that has been submitted previously and counted towards another course without the permission from the relevant Course Coordinator and 2) making contact or colluding with another person, contrary to instructions, during and examination, in-term test, quiz or other individual assessment item are considered forms of Academic Fraud within the <a href="#">Student Academic Integrity Policy</a>. This information is located in the <a href="#">Policy Glossary</a>, under Academic Fraud, the <a href="#">Academic Integrity Module</a> and/or details in HLSC1000 content on Academic Integrity for more information.</i>
Use of AI	<b>AI</b> tools have the potential to greatly enhance the speed and efficiency of our work, but also pose ethical concerns including around academic integrity. Please make yourself familiar with the expectations on AI use for this <b>Course</b> by accessing the information in Canvas that has been developed specifically to guide you through the guidelines of AI use for the Course. It is critical that any work submitted for the purposes of MRSC4080 is the student's own original work and that all work is referenced using referencing conventions.

Assessment 1 – Online Discussions	
Assessment Type	Online Learning Activity
Description	Students will engage in two (2) online <b>Group Discussions</b> relating to advanced and future practice in medical imaging and/or radiation therapy. Each Discussion will be open for two (2) weeks and students are expected to post at least <b>TWICE</b> in each discussion. Topics will be advised via Canvas (and found in the <b>Assessment Guidelines Document</b> ).
Weighting	15% per Discussion (30% total mark)
Due Date	<b>As per details in Table above</b> Students are expected to complete the initial discussion post in the <b>first open week</b> and at least another post in the <b>second week</b> , <i>responding to another students' initial post.</i>
Submission Method	Online via Canvas
Assessment Criteria	See Canvas & <b>Assessment Guidelines Document</b>
Return Method	Online
Feedback Provided	Online
Opportunity to Reattempt	Students will NOT be given the opportunity to reattempt this assessment. Reattempt only available if Adverse Circumstances application approved.
Word Limits	Any work after the <b>maximum word limit</b> may not be included within the allocation of marks. Note: Course Co-ordinator will allow a tolerance of 10% of the word limit.

Assessment 2 – Written Assignment PART A	
Assessment Type	Written Assignment (Please see <b>Assessment Guidelines Document</b> found in Canvas for further details).
Description	This task is designed to assess students' ability to demonstrate high order skills and to communicate concepts within the framework of evidence-based practice for a specific topic. The student will develop and submit a <b>Research Question or Hypothesis</b> and a <b>Search Strategy</b> relevant to the specified area of advanced or future practice.
Weighting	20%

<b>Compulsory Requirements</b>	Attempt/Submission Requirement – Students must attempt/submit this assessment item to pass the course.
<b>Due Date</b>	As per Table above.
<b>Submission Method</b>	Turnitin
<b>Assessment Criteria</b>	See Canvas & <b>Assessment Guidelines Document</b>
<b>Return Method</b>	Online
<b>Feedback Provided</b>	Online
<b>Opportunity to Reattempt</b>	Students will NOT be given the opportunity to reattempt this assessment. Reattempt only available if Adverse Circumstances application approved.
<b>Word Limits</b>	Any work after the maximum word limit may not be included within the allocation of marks. Note: Course Co-ordinator will allow a tolerance of 10% of the word limit.

<b>Assessment 2 – Written Assignment PART B</b>	
<b>Assessment Type</b>	Written Assignment (Please see <b>Assessment Guidelines Document</b> found in Canvas for further details).
<b>Description</b>	Students will complete a 3,000-word literature review on their nominated topic as submitted in PART A.
<b>Weighting</b>	50%
<b>Compulsory Requirements</b>	Attempt/Submission Requirement – Students must attempt/submit this assessment item to pass the course.
<b>Due Date</b>	As per Table above.
<b>Submission Method</b>	Turnitin
<b>Assessment Criteria</b>	See Canvas & <b>Assessment Guidelines Document</b>
<b>Return Method</b>	Online
<b>Feedback Provided</b>	Online
<b>Opportunity to Reattempt</b>	Students will NOT be given the opportunity to reattempt this assessment. Reattempt only available if Adverse Circumstances application approved.
<b>Word Limits</b>	Any work after the maximum word limit may not be included within the allocation of marks. Note: Course Co-ordinator will allow a tolerance of 10% of the word limit.

## ADDITIONAL INFORMATION

### Grading Scheme

This course is graded as follows:

Range of Marks	Grade	Description
85-100	High Distinction (HD)	Outstanding standard indicating comprehensive knowledge and understanding of the relevant materials; demonstration of an outstanding level of academic achievement; mastery of skills*; and achievement of all assessment objectives.
75-84	Distinction (D)	Excellent standard indicating a very high level of knowledge and understanding of the relevant materials; demonstration of a very high level of academic ability; sound development of skills*; and achievement of all assessment objectives.

65-74	Credit (C)	Good standard indicating a high level of knowledge and understanding of the relevant materials; demonstration of a high level of academic achievement; reasonable development of skills*; and achievement of all learning outcomes.
50-64	Pass (P)	Satisfactory standard indicating an adequate knowledge and understanding of the relevant materials; demonstration of an adequate level of academic achievement; satisfactory development of skills*; and achievement of all learning outcomes.
0-49	Fail (FF)	Failure to satisfactorily achieve learning outcomes. If all compulsory course components are not completed the mark will be zero. A fail grade may also be awarded following disciplinary action.

\*Skills are those identified for the purposes of assessment task(s).

<b>Communication Methods</b>	Communication methods used in this course include: Email, Zoom
<b>Course Evaluation</b>	Each year feedback is sought from students and other stakeholders about the courses offered in the University for the purposes of identifying areas of excellence and potential improvement.
<b>Oral Interviews (Vivas)</b>	As part of the evaluation process of any assessment item in this course an oral examination (viva) may be conducted. The purpose of the oral examination is to verify the authorship of the material submitted in response to the assessment task. The oral examination will be conducted in accordance with the principles set out in the <a href="#">Oral Examination (viva) Procedure</a> . In cases where the oral examination reveals the assessment item may not be the student's own work the case will be dealt with under the <a href="#">Student Conduct Rule</a> .
<b>Academic Misconduct</b>	All students are required to meet the academic integrity standards of the University. These standards reinforce the importance of integrity and honesty in an academic environment. Academic Integrity policies apply to all students of the University in all modes of study and in all locations. For the Student Academic Integrity Policy, refer to <a href="https://policies.newcastle.edu.au/document/view-current.php?id=35">https://policies.newcastle.edu.au/document/view-current.php?id=35</a> .
<b>Adverse Circumstances</b>	The University acknowledges the right of students to seek consideration for the impact of allowable adverse circumstances that may affect their performance in assessment item(s). Applications for special consideration due to adverse circumstances will be made using the online Adverse Circumstances system where: <ol style="list-style-type: none"> <li>the assessment item is a major assessment item; or</li> <li>the assessment item is a minor assessment item and the Course Co-ordinator has specified in the Course Outline that students may apply the online Adverse Circumstances system;</li> <li>you are requesting a change of placement; or</li> <li>the course has a compulsory attendance requirement.</li> </ol> Before applying you must refer to the Adverse Circumstance Affecting Assessment Items Procedure available at: <a href="https://policies.newcastle.edu.au/document/view-current.php?id=236">https://policies.newcastle.edu.au/document/view-current.php?id=236</a>
<b>Important Policy Information</b>	The Help button in the Canvas Navigation menu contains helpful information for using the Learning Management System. Students should familiarise themselves with the policies and procedures at <a href="https://www.newcastle.edu.au/current-students/respect-at-uni/policies-and-procedures">https://www.newcastle.edu.au/current-students/respect-at-uni/policies-and-procedures</a> that support a safe and respectful environment at the University.

*This course outline was approved by the Head of School. No alteration of this course outline is permitted without Head of School approval. If a change is approved, students will be notified and an amended course outline will be provided in the same manner as the original.*  
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