

## MRSC1330: Nuclear Medicine Professional Practice 1B

Callaghan

Semester 2 - 2023



THE UNIVERSITY OF  
NEWCASTLE  
AUSTRALIA

## OVERVIEW

### Course Description

This course introduces students to clinical Nuclear Medicine professional practice. Students will begin to develop professional knowledge, skills, attitudes and experience, by participating in professional skills labs at university and by attending a professional placement at an accredited Nuclear Medicine clinical centre. The labs and professional placement will facilitate the development of student confidence and competence in undertaking and participating in basic Nuclear Medicine professional procedures. This course recognises the Professional Capabilities developed by the Medical Radiation Practice Board of Australia (MRPBA).

### Review of Progress Requirements

This course is a compulsory program requirement for students in the following program(s):

- Bachelor of Medical Radiation Science (Honours) (Nuclear Medicine)

In addition to meeting the University's overall requirements for academic progression, students enrolled in these program(s) must satisfactorily complete this course in order to progress in their program.

### Requisites

Students must have successfully completed MRSC1010, HLSC1000 and HUBS1105, plus be concurrently enrolled in MRSC1350 (or have previously completed MRSC1350) and be active in the Bachelor of Medical Radiation Science (Honours) (Nuclear Medicine) [40011] program.

### Assumed Knowledge

HLSC1000  
MRSC1010  
HUBS1105  
HUBS1401

### Contact Hours

#### Callaghan Clinical \*

Face to Face off Campus  
40 hour(s) per Week for 1 Week  
Professional Placement for 5 shifts during the semester.  
Clinical briefing and debriefing prior to and following placement – compulsory attendance.

#### Laboratory \*

Face to Face on Campus  
2 hour(s) per Week for 10 Weeks

#### Lecture \*

Face to Face on Campus  
2 hour(s) per Week for 3 Weeks

\* This contact type has a compulsory requirement.

# COURSE OUTLINE

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

CRICOS Provider 00109J

<b>Unit Weighting</b>	10
<b>Workload</b>	Students are required to spend on average 120-140 hours of effort (contact and non-contact) including assessments per 10-unit course.

## CONTACTS

<b>Course Coordinator</b>	<b>Callaghan</b> Mrs Melissa Shields Melissa.Shields@newcastle.edu.au (02) 4921 6335 Consultation: Please email to make an appointment
<b>Teaching Staff</b>	Other teaching staff will be advised on the course Canvas site.
<b>School Office</b>	<b>School of Health Sciences</b> Room 302, ICT Building Callaghan SchoolHealthSciences@newcastle.edu.au +61 2 4921 7053

## SYLLABUS

<b>Course Content</b>	<ol style="list-style-type: none"><li>1. Basic Nuclear Medicine Concepts</li><li>2. Introduction to Radiopharmacy</li><li>3. Nuclear Medicine Image Acquisition</li><li>4. Nuclear Medicine Quality Control</li><li>5. Nuclear Medicine Skeletal Imaging Techniques</li><li>6. Nuclear Medicine Pulmonary Imaging Techniques</li><li>7. Introductory CT</li><li>8. Risk Assessment</li></ol>
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<b>Course Learning Outcomes</b>	<p><b>On successful completion of this course, students will be able to:</b></p> <ol style="list-style-type: none"><li>1. Apply, participate in, and develop clinical skills in, Nuclear Medicine procedures at a level suitable to their current clinical experience</li><li>2. Develop and demonstrate a professional attitude towards members of the public and other health care workers</li><li>3. Develop clinical reasoning skills</li><li>4. Demonstrate communication skills with members of the public and other health care workers</li><li>5. Practice within an ethical and legal framework</li><li>6. Be able to evaluate and critique his or her role within and during the clinical period, according to the level of experience</li><li>7. Identify the signs and symptoms of medical emergencies that may occur in medical imaging or nuclear medicine departments and demonstrate actions that may be taken to manage these.</li><li>8. Demonstrate radiopharmaceutical procedures.</li><li>9. Demonstrate an ability to identify hazards in the workplace and perform a basic risk assessment.</li></ol>
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## Course Materials

All course materials will be provided on the MRSC1330 Canvas site.

Recommended Texts (all available via the UON Library):

- Waterstram-Rich, K., Gilmore, D. (2016). Nuclear Medicine and PET/CT Technology and Techniques (8<sup>th</sup> Ed.)
- Saha, G.B (2018) Fundamentals of Nuclear Pharmacy (7<sup>th</sup> Ed.)
- Mettler, F., Guiberteau, M. (2019) Essentials of Nuclear Medicine and Molecular Imaging (7<sup>th</sup> Ed.)
- O'Malley, J., Ziessman, H. (2021) Nuclear Medicine and Molecular Imaging: the requisites (5<sup>th</sup> Ed.)

# COMPULSORY REQUIREMENTS

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

## Contact Hour Requirements:

- Laboratory: There is a compulsory attendance requirement in this course. Must complete compulsory lab induction in Canvas prior to the Week 1 lab.  
Must attend compulsory lab assessment in week 13  
Must attend a minimum of 75% of labs overall (8 out of 10)
- Clinical Briefing Lectures: There is a compulsory attendance requirement in this course.  
Students must attend all three (3) clinical briefing/debriefing lectures in Weeks 3, 7 and 11.
- Clinical: Students must attend clinical placement to pass the course.

## Course Assessment Requirements:

- Assessment 1 - Report: Pass Requirement - Students must pass this assessment item to pass the course. To pass this course, students must gain a Satisfactory grade in the clinical supervisor assessment.
- Assessment 2 - Laboratory Exercises: Pass Requirement - Students must pass this assessment item to pass the course.

## Pre-Placement Requirements:

- NSW Health Verification Requirements - Mandatory NSW Health Verification Requirements must be met.

# ASSESSMENTS

This course has 2 assessments. Each assessment is described in more detail in the sections below.

	Assessment Name	Due Date	Involvement	Weighting	Learning Outcomes
1	Report - Professional Placement Workbook*	Week 12 – Monday 16 <sup>th</sup> October 2023 by 4pm	Individual	60%	1, 2, 3, 4, 5, 6, 7, 9
2	Practical Radiopharmacy Lab Assessment*	Week 13 in the timetabled lab sessions	Individual	30%	1, 8
3	Quizzes	Weekly – prior to the timetabled lab	Individual	10%	1, 8

\* This assessment has a compulsory requirement.

## Late Submissions

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 assessment item for each day or part day that the assessment item is late. Note: this applies equally to week and weekend days.

## Assessment 1 - Report - Professional Placement Workbook

<b>Assessment Type</b>	Report
<b>Description</b>	Completion of clinical workbook, case study and reflective report <ul style="list-style-type: none"><li>- Final clinical supervisor report: satisfactory/non-satisfactory</li><li>- Case Study: 30%</li><li>- Risk Assessment: 10%</li><li>- Reflective Report: 20%</li></ul>
<b>Weighting</b>	60%
<b>Compulsory Requirements</b>	Pass Requirement - Students must pass this assessment item to pass the course.
<b>Due Date</b>	Week 12 – Monday 16 <sup>th</sup> October 2023 by 4pm
<b>Submission Method</b>	Online via Canvas
<b>Assessment Criteria</b>	See MRSC1330 Canvas site
<b>Return Method</b>	Online via Canvas
<b>Feedback Provided</b>	Online via Canvas and in-class
<b>Opportunity to Reattempt</b>	Students WILL NOT be given the opportunity to reattempt this assessment. No opportunity for remediation for the professional placement will be allowed unless accompanied by Adverse Circumstances application.

## Assessment 2 - Practical Radiopharmacy Lab Assessment

<b>Assessment Type</b>	Laboratory Exercises
<b>Description</b>	Radiopharmacy skills assessment
<b>Weighting</b>	30%
<b>Compulsory Requirements</b>	Pass Requirement - Students must pass this assessment item to pass the course.
<b>Due Date</b>	Week 13 – in the timetabled lab sessions
<b>Submission Method</b>	In class
<b>Assessment Criteria</b>	See MRSC1330 Canvas site. Also discussed in radiopharmacy labs.
<b>Return Method</b>	In class
<b>Feedback Provided</b>	In class
<b>Opportunity to Reattempt</b>	Students WILL be given the opportunity to reattempt this assessment. The Re-attempt is permitted if adverse circumstances affect performance or prevent attendance.

## Assessment 3 - Quizzes

<b>Assessment Type</b>	Weekly quizzes
<b>Description</b>	Weekly quizzes associated with the radiopharmacy lab pre-reading
<b>Weighting</b>	10% overall
<b>Compulsory Requirements</b>	There are no compulsory requirements for this assessment
<b>Due Date</b>	Weekly – prior to the timetabled lab
<b>Submission Method</b>	Online via Canvas
<b>Assessment Criteria</b>	See MRSC1330 Canvas site
<b>Return Method</b>	Online via Canvas
<b>Feedback Provided</b>	Online via Canvas and in class
<b>Opportunity to Reattempt</b>	Students WILL NOT be given the opportunity to reattempt this assessment unless accompanied by adverse circumstances application.

# 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).

## Communication Methods

Communication methods used in this course include:

- Face to face in lectures and labs
- Online through announcements and email via Canvas
- Through personal emails (using UON email address)

## Course Evaluation

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.

## Oral Interviews (Vivas)

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 [Oral Examination \(viva\) Procedure](#). 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 [Student Conduct Rule](#).

## Academic Misconduct

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 <https://policies.newcastle.edu.au/document/view-current.php?id=35>.

The use of live-response ("homework helper") websites or applications during assessment items may be considered to be academic misconduct, and will be referred to the Student Academic Conduct Officer (SACO) under the University's [Student Conduct Rule](#).

The submission of generative AI chatbot (e.g. ChatGPT) products or materials, in whole or in part, and represented as a student's own original work, could be considered "dishonest or

reckless conduct by a student to gain an advantage'. This may be considered Academic Misconduct under the University's [Student Conduct Rule](#).

The use of websites or applications during assessment items ("Tabbing" or "Alt-Tabbing") may be considered to be academic misconduct, and will be referred to the Student Academic Conduct Officer (SACO) under the University's [Student Conduct Rule](#). In all cases, unless your Course Co-Ordinator has explicitly allowed a resource, then you must assume that a resource (text, website and/or application) is not to be used during an assessment item.

Academic Misconduct has the potential for serious consequences, including failing the course, or being suspended or excluded from the University.

### **Adverse Circumstances**

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:

1. the assessment item is a major assessment item; or
2. 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;
3. you are requesting a change of placement; or
4. the course has a compulsory attendance requirement.

Before applying you must refer to the Adverse Circumstance Affecting Assessment Items Procedure available at:

<https://policies.newcastle.edu.au/document/view-current.php?id=236>

### **Important Policy Information**

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 <https://www.newcastle.edu.au/current-students/no-room-for/policies-and-procedures> 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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