

MRSC2300: Nuclear Medicine Methods IIA

Callaghan

Semester 1 - 2024



THE UNIVERSITY OF
NEWCASTLE
AUSTRALIA

OVERVIEW

Course Description This course further develops fundamental professional Nuclear Medicine concepts and generic graduate learning outcomes. Both of these directly contribute to Nuclear Medicine professional practice. The Nuclear Medicine professional specific topics covered in this course include pulmonary and endocrine imaging, paediatric imaging, and critical appraisal of research papers.

Requisites Students must be concurrently enrolled in MRSC2330, have successfully completed MRSC1330, MRSC1350 and be active in the B MRS (Honours) (Nuclear Medicine) (40011) program to enrol in this course.

Assumed Knowledge MRSC1300, MRSC1330, MRSC1350

Contact Hours

**Callaghan
Lecture**
Face to Face On Campus
2 hour(s) per Week for 7 Weeks

Tutorial
Face to Face On Campus
2 hour(s) per Week for 7 Weeks

Unit Weighting 10

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

COURSE OUTLINE

CONTACTS

Course Coordinator	Callaghan Mr David Lyall ICT308 david.Lyall@newcastle.edu.au 0249215083 Consultation: By appointment
Teaching Staff	Other teaching staff will be advised on the course Blackboard site.
School Office	School of Health Sciences ICT302 ICT Building Callaghan SchoolHealthSciences@newcastle.edu.au +61 2 4921 7053

SYLLABUS

Course Content	Profession specific: <ol style="list-style-type: none">1. Pulmonary system2. Endocrine imaging3. Paediatric imaging4. Critical Appraisal of Research Papers
Course Learning Outcomes	On successful completion of this course, students will be able to: <ol style="list-style-type: none">1. Describe and apply correct nuclear medicine practice in the diagnosis and treatment of disease, and appreciate the range of disease processes which can be diagnosed and treated with nuclear medicine and hybrid imaging2. Apply clinical reasoning skills to patient management, patient care, and imaging/treatment evaluation3. Continue to develop communication skills4. Apply critical reasoning skills through the use of structured critical appraisal approach5. Conduct a literature search using all major information technologies6. Reflect on & evaluate personal & peer contribution to the learning process via formal self & peer assessment
Course Materials	<u>1. Essential Texts:</u> <ul style="list-style-type: none">- Mettler, F., Guiberteau, M. (2018) Essentials of Nuclear Medicine and Molecular Imaging. (7th Ed). Philadelphia:Saunders- Saha, G.B. (2018) Fundamentals of Nuclear Pharmacy. (7th Ed). Springer <u>2. Recommended Texts:</u> <ul style="list-style-type: none">- Christian, P., Waterstram-Rich, K. (2016). Nuclear Medicine & PET/CT Technology & Techniques. (8th Ed). St Louis: Mosby. <u>3. Canvas resources</u> <p>The learning materials for this course will include will be located on the site. It is the student's responsibility to find and acquire relevant information for their work in this course.</p>

COMPULSORY REQUIREMENTS

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

Contact Hour Requirements:

Course Assessment Requirements:

- Assessment 1 - Written Assignment: Pass Requirement - Students must pass this assessment item to pass the course. The assessment is a compulsory course component.
- Assessment 2 - Examination: Pass Requirement - Students must pass this assessment item to pass the course. The exam is a compulsory course component. In order to pass the course the student must attempt this assessment item.
To pass this course the student must obtain a mark of over 50% in the final exam

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	Quiz – online Part A	Tuesday 12 March 2024, 10am-1pm	Individual	15%	1, 2 and 4
2	Quiz – online Part B	Tuesday 2 nd April 2024, 10am-1pm	Individual	15%	1, 2 and 4
3	Written Assignment – Critical Appraisal	Tuesday 9 th April 2024, 1pm	Individual	30%	1, 2, 3, 4, 5 and 6
4	Formal Examination*	Examination Period	Individual	40%	1, 2, and 3

* 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 1A – Quiz - online

Assessment Type	Quiz - online
Description	This assessment is designed to assess students' knowledge and higher order skill to apply knowledge to concepts and situations to demonstrate specific professional concepts & professional clinical knowledge.
Weighting	15%
Compulsory Requirements	N/A
Due Date	Tuesday 12 th March 2024, 10am – 1pm
Submission Method	Online via canvas
Assessment Criteria	As published via Canvas
Return Method	Not applicable
Feedback Provided	via Canvas
Opportunity to Reattempt	Students WILL NOT be given the opportunity to reattempt this assessment. No re-attempt without Adverse Circumstance application

Assessment 1B – Quiz - online

Assessment Type	Quiz - online
Description	This assessment is designed to assess students' knowledge and higher order skill to apply knowledge to concepts and situations to demonstrate specific professional concepts & professional clinical knowledge.
Weighting	15%
Compulsory	N/A
Requirements	
Due Date	Tuesdat 2 nd April 2024, 10am – 1pm
Submission Method	Online via canvas
Assessment Criteria	As published via Canvas
Return Method	Not applicable
Feedback Provided	via Canvas
Opportunity to Reattempt	Students WILL NOT be given the opportunity to reattempt this assessment. No re-attempt without Adverse Circumstance application

Assessment 2 – Critical Appraisal

Assessment Type	Written Assignment
Description	This assessment is designed to assess students' knowledge and skill to develop and search strategy of the peer reviewed literature and to apply this knowledge perform a critical appraisal.
Weighting	30%
Compulsory	N/A
Requirements	
Due Date	Tuesday 9 th April 2024, 1pm
Submission Method	Turnitin – via canvas
Assessment Criteria	As published via Canvas
Return Method	N/A
Feedback Provided	Via Canvas
Opportunity to Reattempt	Students WILL NOT be given the opportunity to reattempt this assessment. No re-attempt without Adverse Circumstance application

Assessment 3 – Formal Examination

Assessment Type	Examination
Description	This assessment is designed to assess students' knowledge and higher order skill to apply knowledge to concepts and situations to demonstrate specific professional concepts & professional clinical knowledge.
Weighting	40%
Compulsory	N/A
Requirements	
Due Date	Examination Period
Submission Method	Written Exam
Assessment Criteria	N/A
Return Method	N/A
Feedback Provided	N/A
Opportunity to Reattempt	Students WILL NOT be given the opportunity to reattempt this assessment. No re-attempt without Adverse Circumstance application

Reminder - Reusing one's own work, or part thereof, that has been submitted previously and counted towards another course without permission from the relevant Course Coordinator and 2) making contact or colluding with another person, contrary to instructions, during an examination, in-term test, quiz or other individual assessment item are considered forms of Academic Fraud within the [Student Academic Integrity Policy](#). This information is located in the policy [glossary](#) under *academic fraud*, the [Academic Integrity Module](#) and/or details in HLSC1000 content on Academic Integrity.

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:
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 .
Adverse Circumstances	<p>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:</p> <ol style="list-style-type: none"> 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. <p>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</p>
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.