

# MEDI 7051 EVIDENCE BASED IMAGING AND CLINICAL PATHWAYS

**Credit Points** 10

**Legacy Code** 401321

**Coordinator** James Nol ([https://directory.westernsydney.edu.au/search/name/James Nol/](https://directory.westernsydney.edu.au/search/name/James%20Nol/))

**Description** Evidence based imaging is a foundation tool that ensures patients are referred to pertinent modalities for tests of high sensitivity and specificity while fostering a cognisance to the harm of investigations such as the low sensitivity of certain modalities to certain investigations, radiation effects and the societal costs of the health budget. This core subject will enable health professionals with an understanding of the best evidence based diagnostic algorithm "pathway" for the different clinical presentations. In conjunction with the radiobiology subject, this will also equip clinicians with the knowledge to better evaluate the risk versus benefit for any examination requested.

**School** Medicine

**Discipline** Radiology

**Student Contribution Band** HECS Band 3 10cp

Check your fees via the Fees ([https://www.westernsydney.edu.au/currentstudents/current\\_students/fees/](https://www.westernsydney.edu.au/currentstudents/current_students/fees/)) page.

**Level** Postgraduate Coursework Level 7 subject

**Pre-requisite(s)** MEDI 7059

## Restrictions

Must be enrolled in 4767 Master of Advanced Imaging (MRI), 4768 Graduate Diploma of Advanced Imaging (MRI) or 4769 Grad Certificate in Advanced Imaging (MRI)

## Learning Outcomes

On successful completion of this subject, students should be able to:

1. Critically analyse the principles of evidence-based health care practice for the delivery of diagnostic imaging in the clinical context.
2. Develop a template algorithm for diagnostic imaging studies of the brain, spine, upper abdomen, pelvis, knee and shoulder.
3. Develop Algorithm Charts for different clinical indications.
4. Review ethical and safety frameworks in health care and their application to practical diagnostic referral issues.
5. Advocate Evidence Based Medicine practice for Imaging Pathways.
6. Identify the ideal clinical and diagnostic pathway best suited for a patient's condition.

## Subject Content

1. Principles of evidence based medicine to Imaging.
2. Algorithm Charts to incorporate continuing change for diagnostic pathways.
3. Evaluation of current diagnostic Imaging pathways of different clinical presentations.

4. Ethical evaluation of the harm versus benefit of diagnostic imaging modalities.

## Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Type	Length	Percent	Threshold	Individual/ Group Task
Literature Review	1 500 words	40	N	Individual
Professional Task	1 500 words including charts, tables and figures x 8	40	N	Individual
Presentation	10 minutes + 1 Abstract	20	N	Individual

Teaching Periods

## Spring (2024)

### Online

### Online

**Subject Contact** James Nol ([https://directory.westernsydney.edu.au/search/name/James Nol/](https://directory.westernsydney.edu.au/search/name/James%20Nol/))

View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=MEDI7051\\_24-SPR\\_ON\\_2#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=MEDI7051_24-SPR_ON_2#subjects))