# MEDI 7075 ADVANCED IMAGING CLINICAL PRACTICE AND RESEARCH

#### Credit Points 20

Coordinator James Nol (https://directory.westernsydney.edu.au/ search/name/James Nol/)

Description This is a 20 credit point year-long subject taken over two sessions (10 credit points in each session). This year long subject will consist of 560 hours of supervised Clinical MRI Practice within the setting of a MRI Clinical Service. The purpose of Clinical MRI Practice is to apply academically acquired knowledge of MRI Practice to patient care in real time. Students will be supervised by experienced Medical MRI Practitioners to develop skills in operating MRI equipment and MR image interpretation for children and adults. Clinical experiences will include history taking, MR safety check, and MRI Protocol setting, Image interpretation, and performing various MRI examinations and understanding the specific sequences of various clinical conditions. Students will need to participate in online case conference discussions. The program will also include 5 assessment case studies selected from their work during placements, and a Research Paper of 5000 words from a case that requires improvement for existing protocols or the introduction of a new protocol.

School Medicine

Discipline Internal Medicine

Student Contribution Band HECS Band 3 10cp

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

Level Postgraduate Coursework Level 7 subject

Equivalent Subjects MEDI 7048 - Advanced Imaging Research Project

#### Restrictions

Students must be enrolled in program 4767 - Master Advanced Imaging (MRI). Students must have completed a minimum of 70 credit points of the 4767 program subjects before enrolling in this subject.

# **Learning Outcomes**

After successful completion of this subject, students will be able to:

1. Examine code of conduct and ethical behaviours of the professional practice required of Diagnostic MRI Practitioners

2. Recognise and interpret patient history, physical and clinical Safety check, and examination results.

3. Perform and interpret common MRI examinations and critical findings with a safe, caring, ethical and professional practice;

 Provide the highest diagnostically confident imaging examinations for the different regions of the human anatomy and for the different pathologies in question;

5. Provide the relevant image interpretation for obtained images and convey the outcome to requesting clinicians.

6. Communicate relevant clinical information to medical clinicians and patients.

7. Utilise evidenced-based approach to improve existing protocols or the introduction of a new protocol.

8. Conduct a research project in the field of medical imaging.

## Subject Content

1. History and Safety examination of patients requiring an MRI examination;

- 2. Performing MRI examinations;
- 3. MR Image interpretation;

4. Clinical assessment case studies: Assessment strategies and reporting;

5. Planning and Conducting a Research Project in medical imaging: Principles and Strategies.

# **Special Requirements**

Essential equipment

Students will need a computer and internet access to use the e-learning platform vUWS at https://vuws.westernsydney.edu.au/

### 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.

| Туре             | Length     | Percent | Threshold | Individual/<br>Group Task |
|------------------|------------|---------|-----------|---------------------------|
| Log/<br>Workbook | 1000 words | 10      | Ν         | Individual                |
| Log/<br>Workbook | 1000 words | 10      | Ν         | Individual                |
| Log/<br>Workbook | 1000 words | 10      | Ν         | Individual                |
| Log/<br>Workbook | 1000 words | 10      | Ν         | Individual                |
| Log/<br>Workbook | 1000 words | 10      | Ν         | Individual                |
| Thesis           | 5000 words | 50      | Υ         | Individual                |

**Teaching Periods** 

# 1st Half (2024)

### Campbelltown

### Hybrid

Subject Contact James Nol (https://directory.westernsydney.edu.au/ search/name/James Nol/)

View timetable (https://classregistration.westernsydney.edu.au/even/ timetable/?subject\_code=MEDI7075\_24-1H\_CA\_3#subjects)

### 2nd Half (2024) Campbelltown

#### Hybrid

Subject Contact James NoI (https://directory.westernsydney.edu.au/ search/name/James NoI/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject\_code=MEDI7075\_24-2H\_CA\_3#subjects)

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