

MEDI8201

Musculoskeletal, Neurosciences and Ageing

MD2A, In person-scheduled-weekday, North Ryde 2025

Macquarie Medical School

Contents

General Information	2
Learning Outcomes	3
Assessment Tasks	4
Delivery and Resources	9
Policies and Procedures	9

Disclaimer

Macquarie University has taken all reasonable measures to ensure the information in this publication is accurate and up-to-date. However, the information may change or become out-dated as a result of change in University policies, procedures or rules. The University reserves the right to make changes to any information in this publication without notice. Users of this publication are advised to check the website version of this publication [or the relevant faculty or department] before acting on any information in this publication.

General Information

Unit convenor and teaching staff Fredrick Joshua

fredrick.joshua@mq.edu.au

John Turchini

john.turchini@mq.edu.au

Credit points

20

Prerequisites

(MEDI8100 or MEDI910) and (MEDI8101 or MEDI911) and (MEDI8102 or MEDI912) and (MEDI8103 or MEDI913) and (MEDI8104 or MEDI914) and (MEDI8105 or MEDI915)

Corequisites

Co-badged status

Unit description

This unit expands on your clinical knowledge and advances your understanding of the clinical disciplines of Musculoskeletal, Neurosciences and Ageing. Over a 10-week period, you will build your understanding of a range of clinical disciplines integrated with applied medical sciences and the social sciences relevant to health and disease. The unit uses a weekly thematic structure, common across all units in the session to provide a central focus for your learning. These themes represent conceptual understanding of the complexity of health; major mechanisms of diseases and important challenges of modern health care delivery. The unit incorporates an experiential learning component contextually focused on patient-centred health care delivered in the clinical disciplines of Musculoskeletal, Neurosciences and Ageing. The unit includes weekly lectures/seminars, case based learning sessions, clinical bedside tutorials, procedural skills sessions, as well as clinical placements. You are expected to use these learning opportunities to demonstrate significant progress toward the development of the 4 Macquarie MD Graduate Capabilities: Scientist and Scholar, Clinical Practitioner, Engaged Global Citizen and Professional, and the Entrustable Professional Activities, at a standard appropriate to end of Stage 1 of the Macquarie MD.

Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at https://www.mq.edu.au/study/calendar-of-dates

Learning Outcomes

On successful completion of this unit, you will be able to:

ULO1: Apply knowledge of relevant medical sciences, clinical presentations, scientific principles and mechanisms of disease to explain a variety of common or clinically-significant disease states, as well as how drugs and other treatments are used to manage or prevent disease in various population sub-groups (Capability 1: Scientist and Scholar).

ULO2: Identify questions and learning needs arising from clinical cases, and work individually or as part of a group to create appropriate responses to clinical scenarios relevant to musculoskeletal, neurosciences and ageing by evaluating evidence from a range of sources, including medical scientific literature (Capability 1: Scientist and Scholar).

ULO3: Elicit a concise and accurate medical history with real patients with common medical or surgical conditions. Identify relevant symptoms, recent and past medical history, medication, allergies and social history, and accurate physical examination identifying relevant abnormal signs (Capability 2: Clinical Practitioner).

ULO4: Summarise history and physical examination findings concisely and accurately in verbal or written form to peers or colleagues (Capability 2: Clinical Practitioner).

ULO5: Use sound clinical reasoning skills to derive diagnoses, investigations and basic management plans for common medical and surgical conditions, as relevant to musculoskeletal, neurosciences and ageing (Capability 2: Clinical Practitioner).

ULO6: Demonstrate basic procedural skills in a simulated or clinical environment (Capability 2: Clinical Practitioner).

ULO7: Identify and discuss, social, cultural and economic factors as well as the healthcare team and health system factors which may impact on healthcare and population health relevant to musculoskeletal, neurosciences and ageing (Capability 3: Engaged Global Citizen)

ULO8: Participate as an effective team player in tutorial groups and clinical environment with peers and clinical staff (Capability 4: Professional).

ULO9: Use feedback from teachers, clinicians, peers and patients, to inform self-evaluation and critical reflection (Capability 4: Professional).

Assessment Tasks

Name	Weighting	Hurdle	Due
Clinical Case Report	20%	No	Week 8
Direct Observation of Procedural Skills (DOPS)	0%	No	Week 10
Mini-CEX	0%	No	Week 10
Written examination	40%	No	Week 10
Clinical Viva	40%	No	Week 10

Clinical Case Report

Assessment Type 1: Case study/analysis Indicative Time on Task 2: 16 hours

Due: Week 8 Weighting: 20%

The clinical case report is a written assignment about a patient for whom you have conducted a comprehensive history and physical examination. Your overall performance, capability aspects and Stage 1 Entrustable Professional Activities will be assessed and recorded in your Macquarie Assessment Portfolio.

- Apply knowledge of relevant medical sciences, clinical presentations, scientific principles
 and mechanisms of disease to explain a variety of common or clinically-significant
 disease states, as well as how drugs and other treatments are used to manage or
 prevent disease in various population sub-groups (Capability 1: Scientist and Scholar).
- Identify questions and learning needs arising from clinical cases, and work individually or
 as part of a group to create appropriate responses to clinical scenarios relevant to
 musculoskeletal, neurosciences and ageing by evaluating evidence from a range of
 sources, including medical scientific literature (Capability 1: Scientist and Scholar).
- Elicit a concise and accurate medical history with real patients with common medical or surgical conditions. Identify relevant symptoms, recent and past medical history, medication, allergies and social history, and accurate physical examination identifying relevant abnormal signs (Capability 2: Clinical Practitioner).

- Summarise history and physical examination findings concisely and accurately in verbal or written form to peers or colleagues (Capability 2: Clinical Practitioner).
- Use sound clinical reasoning skills to derive diagnoses, investigations and basic management plans for common medical and surgical conditions, as relevant to musculoskeletal, neurosciences and ageing (Capability 2: Clinical Practitioner).
- Demonstrate basic procedural skills in a simulated or clinical environment (Capability 2: Clinical Practitioner).
- Identify and discuss, social, cultural and economic factors as well as the healthcare team
 and health system factors which may impact on healthcare and population health
 relevant to musculoskeletal, neurosciences and ageing (Capability 3: Engaged Global
 Citizen)

Direct Observation of Procedural Skills (DOPS)

Assessment Type 1: Clinical performance evaluation

Indicative Time on Task 2: 6 hours

Due: Week 10 Weighting: 0%

DOPS assessments are formative and are designed to provide you with personalised feedback to improve your clinical skills. Overall performance, capability aspects and Stage 1 Entrustable Professional Activities will be assessed and recorded in your Macquarie Assessment Portfolio.

- Apply knowledge of relevant medical sciences, clinical presentations, scientific principles
 and mechanisms of disease to explain a variety of common or clinically-significant
 disease states, as well as how drugs and other treatments are used to manage or
 prevent disease in various population sub-groups (Capability 1: Scientist and Scholar).
- Elicit a concise and accurate medical history with real patients with common medical or surgical conditions. Identify relevant symptoms, recent and past medical history, medication, allergies and social history, and accurate physical examination identifying relevant abnormal signs (Capability 2: Clinical Practitioner).
- Summarise history and physical examination findings concisely and accurately in verbal or written form to peers or colleagues (Capability 2: Clinical Practitioner).
- Use sound clinical reasoning skills to derive diagnoses, investigations and basic management plans for common medical and surgical conditions, as relevant to

musculoskeletal, neurosciences and ageing (Capability 2: Clinical Practitioner).

- Demonstrate basic procedural skills in a simulated or clinical environment (Capability 2: Clinical Practitioner).
- Participate as an effective team player in tutorial groups and clinical environment with peers and clinical staff (Capability 4: Professional).
- Use feedback from teachers, clinicians, peers and patients, to inform self-evaluation and critical reflection (Capability 4: Professional).

Mini-CEX

Assessment Type 1: Clinical performance evaluation

Indicative Time on Task 2: 6 hours

Due: Week 10 Weighting: 0%

Mini-CEX assessments are formative and are designed to provide you with personalised feedback to improve your clinical skills. Overall performance, capability aspects and Stage 1 Entrustable Professional Activities will be assessed and recorded in your Macquarie Assessment Portfolio.

- Apply knowledge of relevant medical sciences, clinical presentations, scientific principles
 and mechanisms of disease to explain a variety of common or clinically-significant
 disease states, as well as how drugs and other treatments are used to manage or
 prevent disease in various population sub-groups (Capability 1: Scientist and Scholar).
- Identify questions and learning needs arising from clinical cases, and work individually or
 as part of a group to create appropriate responses to clinical scenarios relevant to
 musculoskeletal, neurosciences and ageing by evaluating evidence from a range of
 sources, including medical scientific literature (Capability 1: Scientist and Scholar).
- Elicit a concise and accurate medical history with real patients with common medical or surgical conditions. Identify relevant symptoms, recent and past medical history, medication, allergies and social history, and accurate physical examination identifying relevant abnormal signs (Capability 2: Clinical Practitioner).
- Summarise history and physical examination findings concisely and accurately in verbal or written form to peers or colleagues (Capability 2: Clinical Practitioner).
- Use sound clinical reasoning skills to derive diagnoses, investigations and basic management plans for common medical and surgical conditions, as relevant to

musculoskeletal, neurosciences and ageing (Capability 2: Clinical Practitioner).

- Identify and discuss, social, cultural and economic factors as well as the healthcare team
 and health system factors which may impact on healthcare and population health
 relevant to musculoskeletal, neurosciences and ageing (Capability 3: Engaged Global
 Citizen)
- Participate as an effective team player in tutorial groups and clinical environment with peers and clinical staff (Capability 4: Professional).
- Use feedback from teachers, clinicians, peers and patients, to inform self-evaluation and critical reflection (Capability 4: Professional).

Written examination

Assessment Type 1: Examination Indicative Time on Task 2: 16 hours

Due: Week 10 Weighting: 40%

The written examination consists of multiple choice and short answer questions which will be mapped to capability aspects. Overall performance and specific capability aspects will be assessed and recorded in your Macquarie Assessment Portfolio.

- Apply knowledge of relevant medical sciences, clinical presentations, scientific principles
 and mechanisms of disease to explain a variety of common or clinically-significant
 disease states, as well as how drugs and other treatments are used to manage or
 prevent disease in various population sub-groups (Capability 1: Scientist and Scholar).
- Identify questions and learning needs arising from clinical cases, and work individually or
 as part of a group to create appropriate responses to clinical scenarios relevant to
 musculoskeletal, neurosciences and ageing by evaluating evidence from a range of
 sources, including medical scientific literature (Capability 1: Scientist and Scholar).
- Use sound clinical reasoning skills to derive diagnoses, investigations and basic management plans for common medical and surgical conditions, as relevant to musculoskeletal, neurosciences and ageing (Capability 2: Clinical Practitioner).
- Identify and discuss, social, cultural and economic factors as well as the healthcare team
 and health system factors which may impact on healthcare and population health
 relevant to musculoskeletal, neurosciences and ageing (Capability 3: Engaged Global

Citizen)

Clinical Viva

Assessment Type 1: Viva/oral examination

Indicative Time on Task 2: 6 hours

Due: Week 10 Weighting: 40%

The viva will involve an oral presentation of the case presented in your Case Report and will involve answering questions relevant to the case. Your overall performance, capability aspects and Stage 1 Entrustable Professional Activities will be assessed and recorded in your Macquarie Assessment Portfolio.

- Apply knowledge of relevant medical sciences, clinical presentations, scientific principles
 and mechanisms of disease to explain a variety of common or clinically-significant
 disease states, as well as how drugs and other treatments are used to manage or
 prevent disease in various population sub-groups (Capability 1: Scientist and Scholar).
- Identify questions and learning needs arising from clinical cases, and work individually or
 as part of a group to create appropriate responses to clinical scenarios relevant to
 musculoskeletal, neurosciences and ageing by evaluating evidence from a range of
 sources, including medical scientific literature (Capability 1: Scientist and Scholar).
- Elicit a concise and accurate medical history with real patients with common medical or surgical conditions. Identify relevant symptoms, recent and past medical history, medication, allergies and social history, and accurate physical examination identifying relevant abnormal signs (Capability 2: Clinical Practitioner).
- Summarise history and physical examination findings concisely and accurately in verbal or written form to peers or colleagues (Capability 2: Clinical Practitioner).
- Use sound clinical reasoning skills to derive diagnoses, investigations and basic management plans for common medical and surgical conditions, as relevant to musculoskeletal, neurosciences and ageing (Capability 2: Clinical Practitioner).
- Identify and discuss, social, cultural and economic factors as well as the healthcare team
 and health system factors which may impact on healthcare and population health
 relevant to musculoskeletal, neurosciences and ageing (Capability 3: Engaged Global
 Citizen)

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
- · the Writing Centre for academic skills support.

Delivery and Resources

The course is delivered by a variety of methods that include:

Bedside tutorials

Case based tutorials

Unit specific learning sessions

Group workshops

Self-directed online learning resources

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://policies.mq.edu.au). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- Academic Appeals Policy
- Academic Integrity Policy
- Academic Progression Policy
- Assessment Policy
- Fitness to Practice Procedure
- Assessment Procedure
- Complaints Resolution Procedure for Students and Members of the Public
- Special Consideration Policy

Students seeking more policy resources can visit Student Policies (https://students.mq.edu.au/support/study/policies). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

To find other policies relating to Teaching and Learning, visit Policy Central (https://policies.mq.e du.au) and use the search tool.

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/admin/other-resources/student-conduct

¹ If you need help with your assignment, please contact:

² Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

Results

Results published on platform other than <u>eStudent</u>, (eg. iLearn, Coursera etc.) or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in <u>eStudent</u>. For more information visit <u>connect.mq.edu.au</u> or if you are a Global MBA student contact globalmba.support@mq.edu.au

Academic Integrity

At Macquarie, we believe <u>academic integrity</u> – honesty, respect, trust, responsibility, fairness and courage – is at the core of learning, teaching and research. We recognise that meeting the expectations required to complete your assessments can be challenging. So, we offer you a range of resources and services to help you reach your potential, including free <u>online writing and maths support</u>, academic skills development and wellbeing consultations.

Student Support

Macquarie University provides a range of support services for students. For details, visit http://students.mq.edu.au/support/

Academic Success

Academic Success provides resources to develop your English language proficiency, academic writing, and communication skills.

- Workshops
- Chat with a WriteWISE peer writing leader
- Access StudyWISE
- Upload an assignment to Studiosity
- Complete the Academic Integrity Module

The Library provides online and face to face support to help you find and use relevant information resources.

- Subject and Research Guides
- Ask a Librarian

Student Services and Support

Macquarie University offers a range of Student Support Services including:

- IT Support
- · Accessibility and disability support with study
- Mental health support
- <u>Safety support</u> to respond to bullying, harassment, sexual harassment and sexual assault

- · Social support including information about finances, tenancy and legal issues
- <u>Student Advocacy</u> provides independent advice on MQ policies, procedures, and processes

Student Enquiries

Got a question? Ask us via the Service Connect Portal, or contact Service Connect.

IT Help

For help with University computer systems and technology, visit http://www.mq.edu.au/about_us/ offices_and_units/information_technology/help/.

When using the University's IT, you must adhere to the <u>Acceptable Use of IT Resources Policy</u>. The policy applies to all who connect to the MQ network including students.

Unit information based on version 2025.02 of the Handbook