



# MEDI3301

## Clinical Neuroscience

Session 2, In person-scheduled-weekday, North Ryde 2023

*Macquarie Medical School*

## Contents

|                                       |   |
|---------------------------------------|---|
| <u>General Information</u>            | 2 |
| <u>Learning Outcomes</u>              | 3 |
| <u>General Assessment Information</u> | 3 |
| <u>Assessment Tasks</u>               | 4 |
| <u>Delivery and Resources</u>         | 6 |
| <u>Unit Schedule</u>                  | 6 |
| <u>Policies and Procedures</u>        | 7 |
| <u>Inclusion and Diversity</u>        | 9 |
| <u>Professionalism</u>                | 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

Co-convenor

Vivek Gupta

[vivek.gupta@mq.edu.au](mailto:vivek.gupta@mq.edu.au)

Contact via email

Level 1, 75 Talavera Road

Consultation by appointment

Co-convenor and Lecturer

Nitin Chitranshi

[nitin.chitranshi@mq.edu.au](mailto:nitin.chitranshi@mq.edu.au)

Contact via email

Level 1, 75 Talavera Road

Consultation by appointment

Lecturer and Tutor

Sarah Hemley

[sarah.hemley@mq.edu.au](mailto:sarah.hemley@mq.edu.au)

Contact via email

Lecturer

Stuart Graham

[stuart.graham@mq.edu.au](mailto:stuart.graham@mq.edu.au)

Contact via email

Credit points

10

Prerequisites

(MEDI204 or MEDI2300) or (COGS202 or COGS2000) or ((HLTH214 or ANAT2004) and (BIOL257 or BIOL2230))

Corequisites

Co-badged status

### Unit description

In this unit, you will explore the pathophysiological basis of common disorders affecting the nervous system, including, but not limited to Alzheimer's disease, stroke, Parkinson's disease, vision disorders, neurotrauma, epilepsy and multiple sclerosis. The current clinical treatment and management of common neurological disorders will be explained and links to ongoing translational research highlighted.

## 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:** Describe the concepts and mechanisms underlying major diseases of the nervous system.

**ULO2:** Discuss the current clinical treatment and management strategies for patients with common neurological disorders.

**ULO3:** Evaluate the current research literature investigating nervous system disorders.

**ULO4:** Discuss how research can improve our understanding of the pathological basis and treatment outcomes for nervous system disorders.

## General Assessment Information

Grade descriptors and other information concerning grading are contained in the [Macquarie University Assessment Policy](#).

All final grades are determined by a grading committee, in accordance with the Macquarie University Assessment Policy, and are not the sole responsibility of the Unit Convenor.

Students will be awarded a final grade and a mark which must correspond to the grade descriptors specified in the [Assessment Procedure](#) (clause 128).

To pass this unit, you must demonstrate sufficient evidence of achievement of the learning outcomes, meet any ungraded requirements, and achieve a final mark of 50 or better.

Further details for each assessment task will be available on iLearn.

## Late Submissions

Unless a Special Consideration request has been submitted and approved, a 5% penalty (OF THE TOTAL POSSIBLE MARK) will be applied each day a written assessment is not submitted, up until the 7th day (including weekends). After the 7th day, a grade of '0' will be awarded even if

the assessment is submitted. Submission time for all written assessments is set at 11.55pm. A 1-hour grace period is provided to students who experience a technical concern.

For example:

| Number of days (hours) late | Total possible marks | Deduction | Raw mark | Final mark |
|-----------------------------|----------------------|-----------|----------|------------|
| 1 day (1-24 hours)          | 100                  | 5         | 75       | 70         |
| 2 days (24-48 hours)        | 100                  | 10        | 75       | 65         |
| 3 days (48-72 hours)        | 100                  | 15        | 75       | 60         |
| 7 days (144-168 hours)      | 100                  | 35        | 75       | 40         |
| >7 days (>168 hours)        | 100                  | -         | 75       | 0          |

For any late submissions of time-sensitive tasks, such as scheduled tests/exams, performance assessments/presentations, and/or scheduled practical assessments/labs, students need to submit an application for Special Consideration.

## Special Consideration

If you are unable to complete an assessment task on or by the specified date due circumstances that are unexpected, unavoidable, significantly disruptive and beyond your control, you may apply for special consideration in accordance with the [special consideration policy](#). Applications for special consideration must be supported by appropriate evidence and submitted via [ask.mq.edu.au](mailto:ask.mq.edu.au).

## Assessment Tasks

| Name                                    | Weighting | Hurdle | Due    |
|---|-----------|--------|--------|
| <a href="#">Neuroscience Assignment</a> | 20%       | No     | Week 6 |
| <a href="#">In-class test</a>           | 30%       | No     | Week 8 |
| <a href="#">Final Exam</a>              | 50%       | No     | TBA    |

## Neuroscience Assignment

Assessment Type <sup>1</sup>: Case study/analysis

Indicative Time on Task <sup>2</sup>: 18 hours

Due: **Week 6**

Weighting: **20%**

Written assignment evaluating and discussing current neurological condition(s) management and treatment.

On successful completion you will be able to:

- Describe the concepts and mechanisms underlying major diseases of the nervous system.
- Discuss the current clinical treatment and management strategies for patients with common neurological disorders.
- Evaluate the current research literature investigating nervous system disorders.
- Discuss how research can improve our understanding of the pathological basis and treatment outcomes for nervous system disorders.

## In-class test

Assessment Type <sup>1</sup>: Quiz/Test

Indicative Time on Task <sup>2</sup>: 14 hours

Due: **Week 8**

Weighting: **30%**

Test assessing unit content delivered to this point.

On successful completion you will be able to:

- Describe the concepts and mechanisms underlying major diseases of the nervous system.
- Discuss the current clinical treatment and management strategies for patients with common neurological disorders.

## Final Exam

Assessment Type <sup>1</sup>: Examination

Indicative Time on Task <sup>2</sup>: 30 hours

Due: **TBA**

Weighting: **50%**

Formal exam assessing the content delivered across the session held during the University examination period.

On successful completion you will be able to:

- Describe the concepts and mechanisms underlying major diseases of the nervous

system.

- Discuss the current clinical treatment and management strategies for patients with common neurological disorders.
- Evaluate the current research literature investigating nervous system disorders.
- Discuss how research can improve our understanding of the pathological basis and treatment outcomes for nervous system disorders.

---

<sup>1</sup> If you need help with your assignment, please contact:

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
- the [Writing Centre](#) for academic skills support.

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

## Delivery and Resources

As a student enrolled in this unit, you will engage in a range of online and face-to-face learning activities, including lectures, tutorials, online modules, face-to-face activities. Further details can be found on the iLearn site for this unit.

### Recommended Readings

1. Clinical Neuroscience: An Illustrated Colour Text. 2014, 1st Edition by Paul Johns (Elsevier)
2. Hankey's Clinical Neurology. 2014, 2nd Edition. Edited by P. B. Gorelick, F. D. Testai, G. J. Hankey, & J. M. Wardlaw, Eds (CRC Press)

### Technology Used

Active participation in the learning activities throughout the unit will require students to have access to a tablet, laptop or similar device. Students who do not own their own laptop computer may borrow one from the university library.

## Unit Schedule

Proposed schedule mentioned below (subject to change during the session).

|        | Topic/Theme  | Learning Activities  | Assessment task |
|--------|--|----------------------|-----------------|
| Week 1 | MEDI3301 Introductory Lecture<br>Alzheimer's disease | Lecture and Tutorial |                 |
| Week 2 | Multiple Sclerosis                                   | Lecture and Tutorial |                 |

|             |                                |                      |                         |
|-------------|--------------------------------|----------------------|-------------------------|
| Week 3      | Vision Disorders               | Lecture and Tutorial |                         |
| Week 4      | Epilepsy                       | Lecture and Tutorial |                         |
| Week 5      | Headache-migraine              | Lecture and Tutorial |                         |
| Week 6      | Depression and Mental Disorder | Lecture and Tutorial | Neuroscience Assignment |
| Week 7      | Stroke                         | Lecture and Tutorial |                         |
| Week 8      | Parkinson's disease            | Lecture and Tutorial | In-class test           |
| Week 9      | Neurotrauma                    | Lecture and Tutorial |                         |
| Week 10     | CSF disorders                  | Lecture and Tutorial |                         |
| Week 11     | Hearing Loss                   | Lecture and Tutorial |                         |
| Week 12     | Peripheral Neuropathy          | Lecture and Tutorial |                         |
| Exam period |                                |                      | Final Exam              |

## Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central \(https://policies.mq.edu.au\)](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 \(https://students.mq.edu.au/support/study/policies\)](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 \(https://policies.mq.edu.au\)](https://policies.mq.edu.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>

## Results

Results published on platform other than [eStudent](#), (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 [eStudent](#). For more information visit [ask.mq.edu.au](http://ask.mq.edu.au) or if you are a Global MBA student contact [globalmba.support@mq.edu.au](mailto:globalmba.support@mq.edu.au)

## Academic Integrity

At Macquarie, we believe [academic integrity](#) – 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 [online writing and maths support](#), [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/>

## The Writing Centre

[The Writing Centre](#) 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](#)
- [Safety support](#) to respond to bullying, harassment, sexual harassment and sexual assault
- [Social support including information about finances, tenancy and legal issues](#)
- [Student Advocacy](#) provides independent advice on MQ policies, procedures, and processes

## Student Enquiries

Got a question? Ask us via [AskMQ](#), 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/](http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/).

When using the University's IT, you must adhere to the [Acceptable Use of IT Resources Policy](#). The policy applies to all who connect to the MQ network including students.

## Inclusion and Diversity

Social inclusion at Macquarie University is about giving everyone who has the potential to benefit from higher education the opportunity to study at university, participate in campus life and flourish in their chosen field. The University has made significant moves to promote an equitable, diverse and exciting campus community for the benefit of staff and students. It is your responsibility to contribute towards the development of an inclusive culture and practice in the areas of learning and teaching, research, and service orientation and delivery. As a member of the Macquarie University community, you must not discriminate against or harass others based on their sex, gender, race, marital status, carers' responsibilities, disability, sexual orientation, age, political Social inclusion at Macquarie University is about giving everyone who has the potential to benefit from higher education the opportunity to study at university, participate in campus life and flourish in their chosen field. The University has made significant moves to promote an equitable, diverse and exciting campus community for the benefit of staff and students. It is your responsibility to contribute towards the development of an inclusive culture and practice in the areas of learning and teaching, research, and service orientation and delivery. As a member of the Macquarie University community, you must not discriminate against or harass others based on their sex, gender, race, marital status, carers' responsibilities, disability, sexual orientation, age, politica.

## Professionalism

In the Faculty of Medicine, Health and Human Sciences, professionalism is a key capability embedded in all our courses.

As part of developing professionalism, students are expected to attend all small group interactive sessions including clinical, practical, laboratory, work-integrated learning (e.g., PACE placements), and team-based learning activities. Some learning activities are recorded (e.g.,

face-to-face lectures), however you are encouraged to avoid relying upon such material as they do not recreate the whole learning experience and technical issues can and do occur. As an adult learner, we respect your decision to choose how you engage with your learning, but we would remind you that the learning opportunities we create for you have been done so to enable your success, and that by not engaging you may impact your ability to successfully complete this unit. We equally expect that you show respect for the academic staff who have worked hard to develop meaningful activities and prioritise your learning by communicating with them in advance if you are unable to attend a small group interactive session.

Another dimension of professionalism is having respect for your peers. It is the right of every student to learn in an environment that is free of disruption and distraction. Please arrive to all learning activities on time, and if you are unavoidably detained, please join activity as quietly as possible to minimise disruption. Phones and other electronic devices that produce noise and other distractions must be turned off prior to entering class. Where your own device (e.g., laptop) is being used for class-related activities, you are asked to close down all other applications to avoid distraction to you and others. Please treat your fellow students with the utmost respect. If you are uncomfortable participating in any specific activity, please let the relevant academic know.