# CHIR8511

## Clinical Neurology

Session 1, In person-scheduled-weekday, North Ryde 2023

*Department of Chiropractic*

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**Disclaimer**

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### General Information

Unit convenor and teaching staff

**Convenor**
Stephney Whillier
steppney.whillier@mq.edu.au
Contact via 9850 9387
75 Talavera road, room 2240
This is best arranged via email

**Tutor**
Jack Sahagian
jack.sahagian@mq.edu.au

Martin Frutiger
martin.frutiger@mq.edu.au

**Credit points**
10

**Prerequisites**
Admission to MChiroprac and (CHIR3106 or CHIR316) or ((CHIR6110 or CHIR602) and (CHIR6111 or CHIR603) and (CHIR6302 or CHIR604) and (CHIR6303 or CHIR605) and (CHIR6410 or CHIR606) and (CHIR6510 or CHIR608))

**Corequisites**

**Co-badged status**

**Unit description**
This unit covers a wide spectrum of clinically relevant neurological conditions for chiropractic students. Students will develop competency in neurological examination and in formulating a differential diagnosis based on the patient's clinical presentation. The knowledge and understanding constructed in this way also enables students to discuss and analyse pertinent case studies with the necessary depth required. The knowledge and skills acquired during this unit are fundamental for diagnostic competence in chiropractic practice. A variety of teaching methods are employed, from lectures based on current evidence that are also made available online, to tutorials that are underpinned by a social constructivist approach to building knowledge, using the discussion of case studies to develop diagnostic skill.
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: Perform the clinical neuromusculoskeletal history taking and examination competently

ULO3: Demonstrate well developed clinical reasoning skills and the ability to diagnose conditions that are suitable for chiropractic care, and identify conditions that are contraindicated for chiropractic care including conditions of non-musculoskeletal origin.

ULO2: Draw on acquired theoretical knowledge in order to tailor the physical examination to the clinical presentation of the patient, and from this develop a differential diagnosis and clinical management plan.

ULO4: Acquire knowledge to evaluate conditions, research these cases further using appropriate reference material and communicate findings

ULO5: Develop a respect and empathy for patients, and an ethical and professional attitude to health care. In this regard, you should develop a commitment to remain informed and up-to-date in your profession

General Assessment Information

Assessment in this unit

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:

<table>
<thead>
<tr>
<th>Number of days (hours) late</th>
<th>Total Possible Marks</th>
<th>Deduction</th>
<th>Raw mark</th>
<th>Final mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 day (1-24 hours)</td>
<td>100</td>
<td>5</td>
<td>75</td>
<td>70</td>
</tr>
<tr>
<td>2 days (24-48 hours)</td>
<td>100</td>
<td>10</td>
<td>75</td>
<td>65</td>
</tr>
<tr>
<td>3 days (48-72 hours)</td>
<td>100</td>
<td>15</td>
<td>75</td>
<td>60</td>
</tr>
<tr>
<td>7 days (144-168 hours)</td>
<td>100</td>
<td>35</td>
<td>75</td>
<td>40</td>
</tr>
<tr>
<td>&gt;7 days (&gt;168 hours)</td>
<td>100</td>
<td>-</td>
<td>75</td>
<td>0</td>
</tr>
</tbody>
</table>

Late submission of time sensitive tasks, such as timetabled tests/exams, scheduled performance assessments/presentations, scheduled practical assessments/labs, will be addressed by the unit convenor in a Special consideration application.

**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.

<table>
<thead>
<tr>
<th>Task</th>
<th>Weight</th>
<th>Due Date</th>
<th>Linked Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Weekly online quizzes</td>
<td>20%</td>
<td>Weekly</td>
<td>1, 3, 4</td>
</tr>
<tr>
<td>1. OSCE I</td>
<td>20%</td>
<td>Week 7</td>
<td>1 - 5</td>
</tr>
<tr>
<td>1. OSCE II</td>
<td>20%</td>
<td>Week 13</td>
<td>1 - 5</td>
</tr>
<tr>
<td>1. One final theory exam</td>
<td>40%</td>
<td>End of Semester exam period</td>
<td>2, 3, 4</td>
</tr>
</tbody>
</table>

**Assessment Tasks Description**
1. **Weekly Quizzes: Eleven (11) quizzes:** 10 minute quizzes to be completed online in WEEKS 2-8, 10 - 13 that will test lecture material of the previous week. See the schedule above for details on content that is covered by looking at the previous week’s lecture content. The format will be multiple choice questions. Each quiz will open on Monday at 8am and close on Sunday at 11:59pm of that week. The first quiz will be posted on Monday of week 2. There will be absolutely no opportunity to submit a quiz after the closing time as answers are released at that point. If you have technical difficulties, email your answers to your convenor and they will be manually marked. If you email these after the closing time, they will not be marked. The quizzes will have a time limit of 10 minutes, and there will be only one submission per student. The resultant mark will be an **AVERAGE of the 11 quiz marks (please note, NOT best x of 11).**

2. **OSCE:** These will assess your competency in performing the neurological examination. Details will be given on iLearn and in the tutorials nearer to the date.

3. **Final examination:** This will cover the content for the entire semester. It tests your knowledge of the theory, and the ability to connect that knowledge to real life situations (e.g., case studies, clinical presentations). It will consist of a 2 hour written exam with multiple choice questions, short answer questions and case studies.

## Assessment Tasks

<table>
<thead>
<tr>
<th>Name</th>
<th>Weighting</th>
<th>Hurdle</th>
<th>Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSCE I</td>
<td>20%</td>
<td>No</td>
<td>Week 7</td>
</tr>
<tr>
<td>Final written examination</td>
<td>40%</td>
<td>No</td>
<td>In the Official Exam Period</td>
</tr>
<tr>
<td>weekly quizzes</td>
<td>20%</td>
<td>No</td>
<td>Weekly</td>
</tr>
<tr>
<td>OSCE II</td>
<td>20%</td>
<td>No</td>
<td>Week 13</td>
</tr>
</tbody>
</table>

**OSCE I**

Assessment Type: Clinical performance evaluation  
Indicative Time on Task: 10 hours  
Due: **Week 7**  
Weighting: **20%**

The OSCE will assess competency in performing the neurological examination.
On successful completion you will be able to:

- Perform the clinical neuromusculoskeletal history taking and examination competently
- Demonstrate well developed clinical reasoning skills and the ability to diagnose conditions that are suitable for chiropractic care, and identify conditions that are contraindicated for chiropractic care including conditions of non-musculoskeletal origin.
- Draw on acquired theoretical knowledge in order to tailor the physical examination to the clinical presentation of the patient, and from this develop a differential diagnosis and clinical management plan.
- Acquire knowledge to evaluate conditions, research these cases further using appropriate reference material and communicate findings
- Develop a respect and empathy for patients, and an ethical and professional attitude to health care. In this regard, you should develop a commitment to remain informed and up-to-date in your profession

**Final written examination**

Assessment Type 1: Examination
Indicative Time on Task 2: 20 hours
Due: In the Official Exam Period
Weighting: 40%

The final exam tests your knowledge of the theory, and the ability to connect that knowledge to real life situations (e.g. case studies, clinical presentations). It will consist of a 2 hour written exam with multiple choice questions and case studies.

On successful completion you will be able to:

- Demonstrate well developed clinical reasoning skills and the ability to diagnose conditions that are suitable for chiropractic care, and identify conditions that are contraindicated for chiropractic care including conditions of non-musculoskeletal origin.
- Draw on acquired theoretical knowledge in order to tailor the physical examination to the clinical presentation of the patient, and from this develop a differential diagnosis and clinical management plan.
- Acquire knowledge to evaluate conditions, research these cases further using appropriate reference material and communicate findings

**weekly quizzes**

Assessment Type 1: Quiz/Test
Indicative Time on Task 2: 10 hours
Due: Weekly
Weighting: 20%

students complete online weekly quizzes based on the previous week’s lectures and case studies

On successful completion you will be able to:

• Perform the clinical neuromusculoskeletal history taking and examination competently
• Demonstrate well developed clinical reasoning skills and the ability to diagnose conditions that are suitable for chiropractic care, and identify conditions that are contraindicated for chiropractic care including conditions of non-musculoskeletal origin.
• Acquire knowledge to evaluate conditions, research these cases further using appropriate reference material and communicate findings

OSCE II
Assessment Type 1: Clinical performance evaluation
Indicative Time on Task 2: 10 hours
Due: Week 13
Weighting: 20%

The OSCE will assess competency in performing the neurological examination and skill in differential diagnosis

On successful completion you will be able to:

• Perform the clinical neuromusculoskeletal history taking and examination competently
• Demonstrate well developed clinical reasoning skills and the ability to diagnose conditions that are suitable for chiropractic care, and identify conditions that are contraindicated for chiropractic care including conditions of non-musculoskeletal origin.
• Draw on acquired theoretical knowledge in order to tailor the physical examination to the clinical presentation of the patient, and from this develop a differential diagnosis and clinical management plan.
• Acquire knowledge to evaluate conditions, research these cases further using appropriate reference material and communicate findings
• Develop a respect and empathy for patients, and an ethical and professional attitude to
health care. In this regard, you should develop a commitment to remain informed and up-to-date in your profession.

1 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.

2 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**

*Delivery mode*

This unit is characterised by a moderate degree of flexibility. It incorporates a variety of learning tools and media. It will comprise:

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lectures</td>
<td>2 × 2 hour lectures per week online</td>
</tr>
<tr>
<td>Tutorials</td>
<td>2 × 2 hour tutorial class per week, weeks 2 – 12</td>
</tr>
<tr>
<td></td>
<td>Tutorial 1: Wednesday 2-4pm or 4-6pm (11WW 320 North Lab)</td>
</tr>
<tr>
<td></td>
<td>Tutorial 2: Thursday 9-11am or 11 – 1 (11WW 330 South Lab)</td>
</tr>
<tr>
<td></td>
<td>Note that you must attend one of the Wednesday, <strong>and</strong> one of the Thursday tutorials per week. This means you attend a total of two tutorials a week.</td>
</tr>
<tr>
<td>Other</td>
<td>Revision, self-instructional learning, preparation for tutorials and readings from the manual/text</td>
</tr>
</tbody>
</table>

Please note that the venues are subject to change until just before the start of the semester. So, for further details on class time and locations for this unit follow the link below:


**Unit Web Page**

You can log in to [iLearn System](https://unitguides.mq.edu.au/unit_offerings/156228/unit_guide/print) via the link listed below:
All lecture materials will be posted on ilearn, and there is also a link to ECHO360 for recordings of the lectures.

**Required and recommended resources**

**Required:**

1. CHIR8511 – Clinical Neurology *Tutorial Course Manual 2023* – This has been uploaded to iLearn. Please be sure to either download, print and bind the manual, or have an iPad or laptop to access the manual during the tutorial.

**Recommended:**


**Required Diagnostic Equipment (Neurological Diagnosis Kit):**

1. A diagnostic set with otoscope and ophthalmoscope
2. A tailor’s measuring tape
3. A 128Hz or 256Hz (vibration) and also a 512Hz (auditory) tuning fork
4. Neurotips
5. Long stem cotton tips/long cotton swabs
6. Disposable tongue depressors
7. Tomahawk reflex hammer
8. A number of tactile items e.g., key, coin etc
9. A mathematical compass:

**A note about textbooks:**

Textbooks for this unit can be purchased online from Booktopia [https://www.booktopia.com.au/coop](https://www.booktopia.com.au/coop).

The list of Macquarie University S1 2023 units and texts can be found on the Booktopia website.
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.

**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.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](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/.

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.
SECTION 7: 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.

SECTION 8: INCLUSION AND INTEGRITY

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 conviction or religious belief. All staff and students are expected to display appropriate behaviour that is conducive to a healthy learning environment for everyone.