CHIR874

Neuromusculoskeletal Diagnosis 2

S2 Day 2019

Dept of Chiropractic

Contents

General Information

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Credit points
4

Prerequisites
CHIR873

Corequisites

Co-badged status

Unit description
This unit builds on the neurology and orthopaedics taught in CHIR873. This unit is continuous with CHIR873, with the two units together covering the full spectrum of clinically relevant neurological and orthopaedic conditions for chiropractic students. Students continue to develop competency in the complete neurological and orthopaedic examination and, especially in this unit, develop their skills in tailoring the examination to the patient and developing a differential diagnosis based on the patient's signs and symptoms at 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.

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:

Demonstrate a highly developed competency in integrating and applying neuromusculoskeletal anatomy, physiology and pathology.
Perform the clinical neuromusculoskeletal history taking and examination with highly developed competency
Show a highly developed ability to draw on their theoretical knowledge in order to tailor the physical examination to the clinical presentation of the patient and from this develop a differential diagnosis.
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.
Show a highly developed ability to acquire knowledge to evaluate conditions, research these cases further using appropriate reference material and communicate findings
Show great competency in practical sessions in which the knowledge acquired in texts and lectures is applied to a group situation. They should be able to reason, question, and communicate their understanding of the content to their fellow students and tutors as they complete tasks set in the practicals.

General Assessment Information

Assessment

Task Assessment	Weighting	Due Date	Linked Learning Outcomes
Neurology OSCE I	10%	Week 5	1, 2, 3, 4,6
Orthopaedics OSCE I	15%	Week 6	1, 2, 3, 4, 6
Neurology Assignment	10%	Week 7, 13 September, 5pm	1, 2, 3, 4, 5
Orthopaedics OSCE II	15%	Week 12	1, 2, 3, 4, 6
Neurology OSCE II	10%	Week 13	1, 2, 3, 4, 6
One Final theory exam	40% (20% Neurology, 20% Orthopaedics)	TBA	1, 3, 4

1. **Final examination**: This will cover the content of the two strands 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 3 hour written exam with multiple choice questions, short answer questions and case studies.
2. **OSCE's:** These will assess your competency in performing the neurological and orthopaedic examinations.
3. **Neurology Assignment: Neurology Case Study**

Case study write-up. You may take any ***neurological*** condition. Write up a case study based on this condition as the diagnosis, under the following titles:

1. Chief complaint: patient's age, sex and presenting symptoms
2. History of the present illness
3. Relevant family history, social and environmental history
4. Relevant medications
5. List of possible diagnoses from the patient history – explain why this list was chosen
6. Results of the neurological exam tailored to the patient history – detail what was done and why it was done, as well as the results of the examination
7. List of possible diagnoses from the neurological exam – explain why this list was chosen
8. Further blood and radiological tests – explain your choices
9. Final diagnosis – explain how and why this was reached
10. Chiropractic management of the final diagnosis – explain why this management will help, and say whether this is substantiated in the present literature.

Any one specific topic can only be done by a **maximum of 3 students**. Therefore each student must send in 3 possible topics they wish to do to the co-ordinator of Neurology, and topics will be assigned on a first come first served basis. This is necessary as the case study you choose will also be the case study you will adopt for the neuroscreens you will be doing in CHIR874. Note these case studies have an early deadline of week 7, as they will be needed in the tutorials in the second half of the semester.

The write-up should reflect your knowledge of the neuroanatomy, neurophysiology and neuropathology of the condition. It should have the history taking, relevant neuroexamination, as well as an understanding of the role of the chiropractor in the management of the condition. This requires a literature search, and all references must be cited in the text and in a reference list.

Please refer to the rubric at the end of the manual to guide you in how the task will be assessed. The references: referencing is Vancouver style: please print out information at: http://www.lib.monash.edu.au/tutorials/citing/vancouver.html and follow it to the letter.

The review must be submitted electronically to 'Turn-it-In' via the iLearn website.

Maximum Length: 4 pages

Font size, margin size, font type, line spacing – don't care, but don't be ridiculous.

1. **Neurological Screening:** Students are required to complete 5 full neurological screenings. Manuals will be marked for completeness. These completed screenings are required for accreditation.

PLEASE NOTE: YOU MUST PASS EACH STRAND OF THIS UNIT IN ORDER TO PASS THE COURSE

Examinations

The University Examination period in for Semester 2 is from the 11 November – 29 November, 2019. You are expected to present yourself for examination at the time and place designated in the University examination timetable. The timetable will be available in draft form approximately eight weeks before the commencement of the examinations and in final form approximately four weeks before the commencement of the examinations: http://www.timetables.mq.edu.au/exam

The only exception to not sitting an examination at the designated time is because of documented illness or unavoidable disruption. In these circumstances you may wish to consider applying for special consideration. The University's Special Consideration Policy can be found at https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policies/special-consideration. Information can also be found at https://students.mq.edu.au/study/my-study-program/special-consideration

Students with a pre-existing disability/health condition or prolonged adverse circumstances may be eligible for ongoing assistance and support. Such support is governed by other policies and may be sought and coordinated through Campus Wellbeing and Support Services.

If a supplementary examination is granted as a result of special consideration, the examination will be scheduled after the conclusion of the official examination period.

If you receive special consideration for the final exam, a supplementary exam will be scheduled in the interval between the regular exam period and the start of the next session. By making a special consideration application for the final exam you are declaring yourself available for a resit during the supplementary examination period and will not be eligible for a second special consideration approval based on pre-existing commitments. Please ensure you are familiar with the policy prior to submitting an application. You can check the supplementary exam information page on FSE101 in iLearn (bit.ly/FSESupp) for dates, and approved applicants will receive an individual notification one week prior to the exam with the exact date and time of their supplementary examination.

Returning Assessment Tasks

1. Neurology and Orthopaedics OSCE: The results of OSCE I and OSCE II for each strand will be immediate and during the exam.
2. Written feedback on the neurology case study assignment will be provided to students after the mid-semester break.
3. Examination: Papers will not be returned. Marks will be released on iLearn, and incorporated into the final unit grade.

Assessment Tasks

Name	Weighting	Hurdle	Due
Neurology OSCE I	10%	No	Week 5

Name	Weighting	Hurdle	Due
Orthopaedics OSCE I	15%	No	Week 6
Neurology OSCE II	10%	No	Week 13
Orthopaedics OSCE II	15%	No	Week 12
Neurology Case Stud Assignment	10%	No	week 7, 13 Sep 5pm
Final Theory Exam	40%	No	Examination Period

Neurology OSCE I

Due: **Week 5**
Weighting: **10%**

OSCE

On successful completion you will be able to:

- Demonstrate a highly developed competency in integrating and applying neuromusculoskeletal anatomy, physiology and pathology.
- Perform the clinical neuromusculoskeletal history taking and examination with highly developed competency
- Show a highly developed ability to draw on their theoretical knowledge in order to tailor the physical examination to the clinical presentation of the patient and from this develop a differential diagnosis.
- 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.
- Show a highly developed ability to acquire knowledge to evaluate conditions, research these cases further using appropriate reference material and communicate findings
- Show great competency in practical sessions in which the knowledge acquired in texts and lectures is applied to a group situation. They should be able to reason, question, and communicate their understanding of the content to their fellow students and tutors as they complete tasks set in the practicals.

Orthopaedics OSCE I

Due: **Week 6**
Weighting: **15%**

OSCE

On successful completion you will be able to:

- Demonstrate a highly developed competency in integrating and applying neuromusculoskeletal anatomy, physiology and pathology.
- Perform the clinical neuromusculoskeletal history taking and examination with highly developed competency
- Show a highly developed ability to draw on their theoretical knowledge in order to tailor the physical examination to the clinical presentation of the patient and from this develop a differential diagnosis.
- 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.
- Show a highly developed ability to acquire knowledge to evaluate conditions, research these cases further using appropriate reference material and communicate findings
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Neurology OSCE II

Due: **Week 13**
Weighting: **10%**

OSCE

On successful completion you will be able to:

- Demonstrate a highly developed competency in integrating and applying neuromusculoskeletal anatomy, physiology and pathology.
- Perform the clinical neuromusculoskeletal history taking and examination with highly developed competency
- Show a highly developed ability to draw on their theoretical knowledge in order to tailor the physical examination to the clinical presentation of the patient and from this develop a differential diagnosis.
- 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.
- Show a highly developed ability to acquire knowledge to evaluate conditions, research

these cases further using appropriate reference material and communicate findings
- Show great competency in practical sessions in which the knowledge acquired in texts and lectures is applied to a group situation. They should be able to reason, question, and communicate their understanding of the content to their fellow students and tutors as they complete tasks set in the practicals.

Orthopaedics OSCE II

Due: **Week 12**
Weighting: **15%**

OSCE

On successful completion you will be able to:

- Demonstrate a highly developed competency in integrating and applying neuromusculoskeletal anatomy, physiology and pathology.
- Perform the clinical neuromusculoskeletal history taking and examination with highly developed competency
- Show a highly developed ability to draw on their theoretical knowledge in order to tailor the physical examination to the clinical presentation of the patient and from this develop a differential diagnosis.
- 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.
- Show a highly developed ability to acquire knowledge to evaluate conditions, research these cases further using appropriate reference material and communicate findings
- Show great competency in practical sessions in which the knowledge acquired in texts and lectures is applied to a group situation. They should be able to reason, question, and communicate their understanding of the content to their fellow students and tutors as they complete tasks set in the practicals.

Neurology Case Stud Assignment

Due: **week 7, 13 Sep 5pm**
Weighting: **10%**

individual case studies

On successful completion you will be able to:

- Demonstrate a highly developed competency in integrating and applying

neuromusculoskeletal anatomy, physiology and pathology.
- Perform the clinical neuromusculoskeletal history taking and examination with highly developed competency
- Show a highly developed ability to draw on their theoretical knowledge in order to tailor the physical examination to the clinical presentation of the patient and from this develop a differential diagnosis.
- 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.
- Show a highly developed ability to acquire knowledge to evaluate conditions, research these cases further using appropriate reference material and communicate findings

Final Theory Exam

Due: **Examination Period**
Weighting: **40%**

Final examination: includes multiple choice, and short answer questions based on clinical case studies.

On successful completion you will be able to:
- Demonstrate a highly developed competency in integrating and applying neuromusculoskeletal anatomy, physiology and pathology.
- Show a highly developed ability to draw on their theoretical knowledge in order to tailor the physical examination to the clinical presentation of the patient and from this develop a differential diagnosis.
- 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.

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:

	Strand 1 Orthopaedics	**Strand 2** Neurology	**TOTAL**

Lectures **Class times & locations**	2 × 2 hour lectures per week, weeks 1 – 12 Monday 3pm - 5pm (14SCO, T3) Wednesday 12-2pm (14 SCO-T3)	1 × 2 hour lectures per week, weeks 1 – 12 Tuesday 8-10am (14SCO, T3)	**6 hours per week (Weeks 1-12)**
Tutorials Class times & locations	1 × 2 hour tutorial class per week, weeks 2 – 12 Thursday 9am-11am or 11am-1pm (11WW 330)	1 × 2 hour tutorial class per week, weeks 2 – 13 Wednesday 2-4pm, 4-6pm, (choose one) in building 11WW 320 North lab	**4 hours per week, weeks 2-13**
Other	1- 2 hours per week revision, self-directed learning	1 - 2 hours per week revision, self-instructional learning and readings from the text	**4 hours per week**

Further details on class time and locations for this unit can be found at:

https://timetables.mq.edu.au/2019/

Tutorials

You must attend the tutorial class in which you enrolled. Students must not exchange their class time. In special circumstances, you may request a specific change. These requests are to be submitted to the strand convener.

Attendance Requirements

If you miss your assigned tutorial in any week, you may request attendance at an alternative session, through email request and appropriate documentation to the unit convenor. This allowance may be used on a maximum of 2 occasions. **If you have missed more than 2 tutorials without giving a reason to the unit convenor for the strand, you will be called in to discuss your progress**.

Unit Web Page

You can log in to ilearn learning system using the link below:

http://ilearn.mq.edu.au

All lectures materials will be posted on ECHO on iLearn, which will be a single link that includes the lecture Powerpoint, additional material like videos, and the recorded lecture. Interactive materials e.g. lecture quizzes and polls will also be available at this site.

4. Required and recommended resources

Strand 1: Orthopaedics

All lecture notes will be posted on ilearn for CHIR 874.

Required Texts:

1. **Magee, D.J.** (2014). Orthopaedic Physical Assessment. 6th Edition. W.D Saunders, Philadelphia

Recommended Texts:

1. **Souza, T.A.** (2009) Differential Diagnosis for the Chiropractor, Aspen Publications.
2. **Brukner, P., Khan, K.** (2011) Brukner & Khan's Clinical Sports Medicine. 4th Ed: McGraw-Hill Book Company Australia.
3. **Evans, R.C.** (2008) Illustrated Orthopaedic Physical Assessment: Mosby.

Strand 2: Neurology

Required:

1. Blumenfeld H (2010) *Neuroanatomy through Clinical Cases*. 2nd ed. Sinauer Associates Inc, Massachusetts. Distributed by Palgrave Macmillan, Victoria, Australia.

2. HLTH874 - Neurology *Tutorial Course Manual* – available at Co-op bookshop. Macquarie University Printery.

Recommended:

- Gates P (2010) Clinical Neurology; A Primer. Churchhill Livingstone Elsevier, Sydney, Australia
- McCance KL, Huether SE, Brashers VL & Rote NS (2010) Pathophysiology, The biologic basis for disease in adults and children Mosby, Elsevier, Canada
- Bickley LS (2009) Bate's Guide to Physical Examination and History Taking. 10th ed. Wolters

Required Diagnostic Equipment (Neurological Diagnosis Kit):

1. A diagnostic set with otoscope and ophthalmoscope (Welsh Allen series 97200-BI recommended - ~$515)
2. A tailor's measuring tape

3. A 128 and 512Hz tuning fork (Al weighted)
4. Neurotips
5. Large stem ear buds
6. Disposable tongue depressors
7. Tomahawk reflex hammer
8. Cotton wool

Unit Schedule

Strand 1: Orthopaedics Timetable

Week	Lecture 1	Lecture 2	Tutorial 1
Week 1 29/7	Introduction to Neuromusculoskeletal Diagnosis II and the classification of neck pain (MF)	Neck Pain due to Serious Pathology (MF)	No Tutorial
Week 2 5/8	Grade III Neck Pain (MF)	Grades I-II Neck Pain (MF)	Orthopaedic Physical Examination of the Cervical Spine - Part I
Week 3 12/8	Whiplash and Associated Disorders (MF)	Thoracic Outlet Syndrome (MF)	Orthopaedic Physical Examination of the Cervical Spine - Part II
Week 4 19/8	Orthopaedic Examination of the Paediatric Patient (MF)	Causes of TMJ pain and dysfunction (MF)	Orthopaedic Physical Examination of the Cervical Spine - Part III and Examination of the TMJ
Week 5 26/8	Conditions of the thoracic spine and rib cage (MF)	Scoliosis and Scheuermann's Disease (BB)	Physical Examination and Orthopaedic Special Tests for Thoracic Outlet Syndrome and the Thoracic Spine and Ribs
Week 6 2/9	Cervical & other neural causes of shoulder pain (MF)	Rotator cuff disorders of the shoulder (MP)	**OSCE I**
Week 7 9/9	Myofascial causes of shoulder pain & impingement (MP)	Labral & instability disorders of the shoulder (MP)	Orthopaedic Physical Examination of the Shoulder - Part I
MIDSEMESTER BREAK, 17 – 28 SEPTEMBER 2019			

Week 8 1/10	Myofascial & neural causes of elbow pain (MF)	Joint and osteological causes of elbow pain (MF)	Orthopaedic Physical Examination of the Shoulder - Part II
Week 9 7/10	Public Holiday No lecture	Myofascial & neural causes of wrist pain (MP)	Orthopaedic Physical Examination of the Elbow - Part I
Week 10 14/10	Joint instability and osteological causes of wrist pain (MP)	Conditions of the wrist (MP)	Orthopaedic Physical Examination of the Wrist Part I
Week 11 21/10	Conditions of the fingers and thumb (MP)	Review lecture (MF)	Orthopaedic Physical Examination of the Wrist - Part II and the Hand and Fingers
Week 12 28/10	No Lecture	No Lecture	**OSCE II**

NEUROLOGY TIMETABLE

WEEK NUMBER	Tuesday: LECTURE SCHEDULE W5A T1	Wednesday: TUTORIAL E5A room 320 North
W1 – Mon July 29	30 July (SW) • Introduction to the course • Examination of peripheral nerves	NONE
W2 – Mon 5 August	6 August (SW) • Abnormal movement, Co-ordination and gait disturbances (SW)	7 August • Neuroexam: peripheral nerve testing, and deep tendon reflexes, case studies
W3 – Mon 12 August	13 August (SW) • Headaches	14 August • Neuroexam: gait & co-ordination, case studies
W4 – Mon 19 August	20 August (SW) • Headaches continued	21 August • Case Studies • Neuroscreen introduction

W5 – Mon 26 August	27 August (AN) • Neurological Differential Diagnosis Part 1	28 August • OSCE I
W6 – Mon 2 September	3 September (AN) • Neurological Differential Diagnosis Part 2	4 September • Feedback on OSCE • case studies/neuroscreen
W7 – Mon 9 September	10 September (AN) • Neurological Differential Diagnosis Part 3	11 September • Problem solving – adapting the examination to the specific needs of the patient • The comatose patient • Case studies/neuroscreen
16 - 29 Sep	MID SEMESTER BREAK	
W8 – Mon 30 September	1 October • The Paediatric Neuroexamination (SW)	2 October • The paediatric neurological examination
W9 - Tuesday 8 October	8 October (AN) • Sensorimotor Control Part 1	9 October • Case studies/neuroscreen
W10– Mon 14 October	15 October (AN) • Sensorimotor Control Part 2	16 October • Case studies/ neuroscreen
W11 – Mon October 21	22 October (AN) • Diagnosis and Management of Central Pain Syndrome Part 1	23 October • Case studies/ neuroscreen
W12 – Mon 28 October	29 October (AN) • Diagnosis and Management of Central Pain Syndrome Part 2	30 October • Revision of the neurological exam

W13 – Mon 4 November	5 November • None	6 November • OSCE II

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central). 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
- Grade Appeal Policy
- Complaint Management Procedure for Students and Members of the Public
- Special Consideration Policy *(**Note:** The Special Consideration Policy is effective from 4 December 2017 and replaces the Disruption to Studies Policy.)*

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

If you would like to see all the policies relevant to Learning and Teaching visit Policy Central (https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central).

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/study/getting-started/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 or if you are a Global MBA student contact globalmba.support@mq.edu.au

Student Support

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

Learning Skills

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study strategies to improve your marks and take control of your study.

- Workshops
- StudyWise
- Academic Integrity Module for Students
- Ask a Learning Adviser

Student Services and Support

Students with a disability are encouraged to contact the Disability Service who can provide appropriate help with any issues that arise during their studies.

Student Enquiries

For all student enquiries, visit Student Connect at ask.mq.edu.au

If you are a Global MBA student contact globalmba.support@mq.edu.au

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.

Graduate Capabilities

PG - Capable of Professional and Personal Judgment and Initiative

Our postgraduates will demonstrate a high standard of discernment and common sense in their professional and personal judgment. They will have the ability to make informed choices and decisions that reflect both the nature of their professional work and their personal perspectives.

This graduate capability is supported by:

Learning outcomes

- Show a highly developed ability to draw on their theoretical knowledge in order to tailor the physical examination to the clinical presentation of the patient and from this develop a differential diagnosis.

- 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.
- Show great competency in practical sessions in which the knowledge acquired in texts and lectures is applied to a group situation. They should be able to reason, question, and communicate their understanding of the content to their fellow students and tutors as they complete tasks set in the practicals.

Assessment tasks

- Neurology OSCE I
- Orthopaedics OSCE I
- Neurology OSCE II
- Orthopaedics OSCE II
- Neurology Case Stud Assignment
- Final Theory Exam

PG - Discipline Knowledge and Skills

Our postgraduates will be able to demonstrate a significantly enhanced depth and breadth of knowledge, scholarly understanding, and specific subject content knowledge in their chosen fields.

This graduate capability is supported by:

Learning outcomes

- Demonstrate a highly developed competency in integrating and applying neuromusculoskeletal anatomy, physiology and pathology.
- Perform the clinical neuromusculoskeletal history taking and examination with highly developed competency
- Show a highly developed ability to draw on their theoretical knowledge in order to tailor the physical examination to the clinical presentation of the patient and from this develop a differential diagnosis.
- Show a highly developed ability to acquire knowledge to evaluate conditions, research these cases further using appropriate reference material and communicate findings

Assessment tasks

- Neurology OSCE I
- Orthopaedics OSCE I
- Neurology OSCE II
- Orthopaedics OSCE II

- Neurology Case Stud Assignment
- Final Theory Exam

PG - Critical, Analytical and Integrative Thinking

Our postgraduates will be capable of utilising and reflecting on prior knowledge and experience, of applying higher level critical thinking skills, and of integrating and synthesising learning and knowledge from a range of sources and environments. A characteristic of this form of thinking is the generation of new, professionally oriented knowledge through personal or group-based critique of practice and theory.

This graduate capability is supported by:

Learning outcomes

- Demonstrate a highly developed competency in integrating and applying neuromusculoskeletal anatomy, physiology and pathology.
- Show a highly developed ability to draw on their theoretical knowledge in order to tailor the physical examination to the clinical presentation of the patient and from this develop a differential diagnosis.
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Assessment tasks

- Neurology OSCE I
- Orthopaedics OSCE I
- Neurology OSCE II
- Orthopaedics OSCE II
- Neurology Case Stud Assignment
- Final Theory Exam

PG - Research and Problem Solving Capability

Our postgraduates will be capable of systematic enquiry; able to use research skills to create new knowledge that can be applied to real world issues, or contribute to a field of study or

practice to enhance society. They will be capable of creative questioning, problem finding and problem solving.

This graduate capability is supported by:

Learning outcomes

- Show a highly developed ability to draw on their theoretical knowledge in order to tailor the physical examination to the clinical presentation of the patient and from this develop a differential diagnosis.
- Show a highly developed ability to acquire knowledge to evaluate conditions, research these cases further using appropriate reference material and communicate findings

Assessment tasks

- Neurology OSCE I
- Orthopaedics OSCE I
- Neurology OSCE II
- Orthopaedics OSCE II
- Neurology Case Stud Assignment
- Final Theory Exam

PG - Effective Communication

Our postgraduates will be able to communicate effectively and convey their views to different social, cultural, and professional audiences. They will be able to use a variety of technologically supported media to communicate with empathy using a range of written, spoken or visual formats.

This graduate capability is supported by:

Learning outcomes

- Show a highly developed ability to draw on their theoretical knowledge in order to tailor the physical examination to the clinical presentation of the patient and from this develop a differential diagnosis.
- 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.
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Assessment tasks

- Neurology OSCE I
- Orthopaedics OSCE I

- Neurology OSCE II
- Orthopaedics OSCE II
- Neurology Case Stud Assignment
- Final Theory Exam

PG - Engaged and Responsible, Active and Ethical Citizens

Our postgraduates will be ethically aware and capable of confident transformative action in relation to their professional responsibilities and the wider community. They will have a sense of connectedness with others and country and have a sense of mutual obligation. They will be able to appreciate the impact of their professional roles for social justice and inclusion related to national and global issues

This graduate capability is supported by:

Learning outcomes

- Show a highly developed ability to draw on their theoretical knowledge in order to tailor the physical examination to the clinical presentation of the patient and from this develop a differential diagnosis.
- Show a highly developed ability to acquire knowledge to evaluate conditions, research these cases further using appropriate reference material and communicate findings
- Show great competency in practical sessions in which the knowledge acquired in texts and lectures is applied to a group situation. They should be able to reason, question, and communicate their understanding of the content to their fellow students and tutors as they complete tasks set in the practicals.

Assessment tasks

- Neurology OSCE I
- Orthopaedics OSCE I
- Neurology OSCE II
- Orthopaedics OSCE II
- Neurology Case Stud Assignment
- Final Theory Exam