

PHTY3070: Advanced Neurological Physiotherapy

Callaghan

Semester 1 - 2024



OVERVIEW

Course Description Advanced clinical knowledge and skills are needed for physiotherapy evaluation and management of complex neurological disorders. The course includes advanced studies in symptomatology; assessment procedures to define impairments and limitations in activity and participation; relevant clinical reasoning processes; and management skills and techniques.

Requisites This course is only available to students enrolled in the Bachelor of Physiotherapy (Honours) program 12337. Students must have successfully completed PHTY2030 and HUBS2505.

Assumed Knowledge All year 1 and 2 Courses in the B PHTY (Hons)

Contact Hours

Callaghan Lecture
Pre recorded and available via CANVAS
2 hour(s) per week for full term

Online Tutorials
Online via Zoom
2 hour(s) per week for full term

Practical
Face to Face On Campus
2 hour(s) per week for full term

Unit Weighting Workload 10
Students are required to spend on average 120-140 hours of effort (contact and non-contact) including assessments per 10 unit course.

COURSE OUTLINE

CONTACTS

Course Coordinator	Callaghan Dr Jodie Marquez Jodie.Marquez@newcastle.edu.au (02) 4921 2041
Teaching Staff	Other teaching staff will be advised on the course Canvas site.
School Office	School of Health Sciences Room 302, ICT Building Callaghan SchoolHealthSciences@newcastle.edu.au +61 2 4921 7053

SYLLABUS

Course Content	<ol style="list-style-type: none">1. Neuroanatomical localisation of cerebral, brainstem and peripheral lesions; symptomatology following brain and spinal cord damage resulting from traumatic and degenerative processes of the nervous system2. Advanced information gathering/history taking and physical examination procedures for patients presenting with complex neurological disorders3. Advanced clinical reasoning in neurological physiotherapy practice in relation to the total management of specific patient cases4. Further outcome measures for neurological disorders, including those used for evaluating impairment, functional limitation and quality of life5. Aetiology, pathology and symptomatology of selected neurological conditions; medical and surgical management, including radiological investigations6. Principles of neurological rehabilitation practice related to selected neurological conditions; biological basis and empirical evidence for physiotherapy interventions7. Advanced physiotherapeutic management of patients with selected neurological conditions, including motor, sensory, perceptual and behavioural/cognitive deficits8. Optimization of motor performance following neurological disorders; advanced skills in training motor/sensory deficits in all functional activities9. Rehabilitation: stages of management (primary, secondary and tertiary)10. Traumatic brain injury: assessment, acute management and rehabilitation11. Management of ataxia and in coordination12. Assessment and management of vestibular disorders13. Spinal cord injury: functional levels, acute management and rehabilitation14. Pharmacology in the management of neurological conditions15. Parkinsonism and other basal ganglia disorders, including medical management16. Physiotherapy management of akinesia, bradykinesia and associated movement problems17. Pathophysiology and management of Multiple Sclerosis.18. Assessment and management of falls risk in the elderly19. Other degenerative neurological disorders, including muscular dystrophies, spinal atrophy and motor neurone disease.20. Roles of other health professionals in team management of complex neurological disorders, including team decision making and service delivery options21. Advocating for the neurological patient: promoting health and preventing secondary dysfunction/disability in a cultural and social context
Course Learning Outcomes	<p>On successful completion of this course, students will be able to:</p> <ol style="list-style-type: none">1. Apply biomedical and behavioural scientific knowledge to the physiotherapy evaluation and management of more complex neurological disorders;2. Describe the aetiology, epidemiology, pathogenesis and clinical presentation of selected common complex neurological disorders3. Apply advanced clinical reasoning skills and an evidence-based approach to decision making in neurological physiotherapy practice;

4. Appropriately select, modify as necessary, and correctly demonstrate advanced physiotherapeutic assessment and treatment procedures commonly used in the management of neurological dysfunction
5. Apply advanced treatment evaluation and intervention outcome processes appropriate for neurological physiotherapy practice
6. Discuss relevant gender, cultural, legal and ethical considerations in managing patients with complex neurological disorders
7. Deliver information to the client, carers and other health care professionals in a manner that promotes participation and the holistic management of neurological patients.
8. Demonstrate an understanding of the role of the physiotherapist in advocating for the neurological patient, promoting health and preventing secondary dysfunction/disability; This includes recognising the importance of providing all neurological physiotherapy services in a culturally appropriate context, including cultural competence in the management of Aboriginal and Torres Strait Islander peoples.

Course Materials

COMPULSORY REQUIREMENTS

In order to pass this course, each student must complete ALL of the following compulsory requirements:

Course Assessment Requirements:

- Assessment 2 - Practical Demonstration: Pass Requirement - Students must pass this assessment item to pass the course.

ASSESSMENTS

This course has 3 assessments. Each assessment is described in more detail in the sections below.

	Assessment Name	Due Date	Involvement	Weighting	Learning Outcomes
1	Formal Exam	Examination period	Individual	40%	1, 2, 3, 5, 6, 8
2	Prac Viva examinations*	Week 13	Individual	40%	1, 4, 5, 6, 7
3	Contribution to online discussions	Weeks 9 and 11	Individual	20%	1, 2, 3, 5, 6, 7, 8

* This assessment has a compulsory requirement.

Late Submissions

The mark for an assessment item submitted after the designated time on the due date, without an approved extension of time, will be reduced by 10% of the possible maximum mark for that assessment item for each day or part day that the assessment item is late. Note: this applies equally to week and weekend days.

Assessment 1 - Formal Exam

Assessment Type	Formal Examination
Description	Written exam including multiple choice and short answer questions
Weighting	40% of final grade
Due Date	Examination Period
Submission Method	Formal exam – Invigilated on Campus
Assessment Criteria	
Return Method	Not returned
Feedback Provided	No feedback

Assessment 2 - Prac Viva examinations

Assessment Type	Practical Demonstration
Description	Practical exam comprised of 3 stations
Weighting	40% of final grade
Compulsory Requirements	Pass Requirement - Students must pass this assessment item to pass the course..
Due Date	Week 13 of semester
Submission Method	In class
Assessment Criteria	
Return Method	N/A
Feedback Provided	Feedback provided by appointment
Opportunity to Reattempt	Students WILL be given the opportunity to reattempt this assessment. Students are required to achieve at least 50% and pass the safety requirement of the prac viva examination to pass the assessment. Students who fail the prac viva, by achieving a mark < 50% in the assessment or fail the safety requirement, may be granted a supplementary assessment. A supplementary assessment will only be granted if the student will pass the course by achieving a minimum mark of 50% in the supplementary prac viva assessment. Students who pass the compulsory course component via the supplementary assessment will have a mark capped at 50% for this assessment item. Students who achieve < 50% in the supplementary or fail the safety requirement will not meet the compulsory course component requirements for the assessment item and will be allocated a fail grade (FF) for the course

Assessment 3 - Contribution to online discussions

Assessment Type	Online Learning Activity
Description	Contributions to online discussion via Canvas
Weighting	20% of final grade
Due Date	Weeks 9 & 11
Submission Method	CANVAS
Assessment Criteria	No grading penalties will be applied for going over the word limit. However any work after the maximum word limit may not be included within the allocation of marks. The coordinator will allow a tolerance of atleast 10% of the word limit
Return Method	N/A
Feedback Provided	In class

ADDITIONAL INFORMATION

- 1) Reusing one's own work, or part thereof, that has been submitted previously and counted towards another course without permission from the relevant Course Coordinator and
- 2) Making contact or colluding with another person, contrary to instructions, during an examination, in-term test, quiz or other individual assessment item are considered forms of Academic Fraud within the [Student Academic Integrity Policy](#).

This information is located in the policy [glossary](#) under *academic fraud*, the [Academic Integrity Module](#) and/or details in HLSC1000 content on Academic Integrity.

Grading Scheme

This course is graded as follows:

Range of Marks	Grade	Description
85-100	High Distinction (HD)	Outstanding standard indicating comprehensive knowledge and understanding of the relevant materials; demonstration of an outstanding level of academic achievement; mastery of skills*; and achievement of all assessment objectives.
75-84	Distinction (D)	Excellent standard indicating a very high level of knowledge and understanding of the relevant materials; demonstration of a very high level of academic ability; sound development of skills*; and achievement of all assessment objectives.
65-74	Credit (C)	Good standard indicating a high level of knowledge and understanding of the relevant materials; demonstration of a

		high level of academic achievement; reasonable development of skills*; and achievement of all learning outcomes.
50-64	Pass (P)	Satisfactory standard indicating an adequate knowledge and understanding of the relevant materials; demonstration of an adequate level of academic achievement; satisfactory development of skills*; and achievement of all learning outcomes.
0-49	Fail (FF)	Failure to satisfactorily achieve learning outcomes. If all compulsory course components are not completed the mark will be zero. A fail grade may also be awarded following disciplinary action.

*Skills are those identified for the purposes of assessment task(s).

Communication Methods

Communication methods used in this course include:
CANVAS site: students will receive communication via the posting of content or announcements on the Canvas course site
Email: students will receive communication via their student email accounts
Face to face: communication will be provided in class and via appointment

Course Evaluation

Each year feedback is sought from students and other stakeholders about the courses offered in the University for the purposes of identifying areas of excellence and potential improvement.

Oral Interviews (Vivas)

As part of the evaluation process of any assessment item in this course an oral examination (viva) may be conducted. The purpose of the oral examination is to verify the authorship of the material submitted in response to the assessment task. The oral examination will be conducted in accordance with the principles set out in the [Oral Examination \(viva\) Procedure](#). In cases where the oral examination reveals the assessment item may not be the student's own work the case will be dealt with under the [Student Conduct Rule](#).

Academic Misconduct

All students are required to meet the academic integrity standards of the University. These standards reinforce the importance of integrity and honesty in an academic environment. Academic Integrity policies apply to all students of the University in all modes of study and in all locations. For the Student Academic Integrity Policy, refer to <https://policies.newcastle.edu.au/document/view-current.php?id=35>.

Adverse Circumstances

The University acknowledges the right of students to seek consideration for the impact of allowable adverse circumstances that may affect their performance in assessment item(s). Applications for special consideration due to adverse circumstances will be made using the online Adverse Circumstances system where:

1. the assessment item is a major assessment item; or
2. the assessment item is a minor assessment item and the Course Co-ordinator has specified in the Course Outline that students may apply the online Adverse Circumstances system;
3. you are requesting a change of placement; or
4. the course has a compulsory attendance requirement.

Before applying you must refer to the Adverse Circumstance Affecting Assessment Items Procedure available at:

<https://policies.newcastle.edu.au/document/view-current.php?id=236>

Important Policy Information

The Help button in the Canvas Navigation menu contains helpful information for using the Learning Management System. Students should familiarise themselves with the policies and procedures at

<https://www.newcastle.edu.au/current-students/no-room-for/policies-and-procedures> that support a safe and respectful environment at the University.

This course outline was approved by the Head of School. No alteration of this course outline is permitted without Head of School approval. If a change is approved, students will be notified and an amended course outline will be provided in the same manner as the original.

