

PHTY2030: Neurological Physiotherapy I

Callaghan

Semester 2 - 2023



THE UNIVERSITY OF
NEWCASTLE
AUSTRALIA

OVERVIEW

Course Description

An introduction to physiotherapy knowledge and clinical skills for the evaluation and management of selected basic neurological disorders across the lifespan. The course includes preliminary 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 PHTY1020, HUBS1105, HUBS2103.

Assumed Knowledge

HLSC1000, PHTY1020, HUBS1403, HUBS1404, HUBS1105, HUBS2103, HUBS2505

Contact Hours

Callaghan Lecture

Face to Face On Campus

18 hour(s) per Term Full Term starting Week 1

Practical

Face to Face On Campus

40 hour(s) per Term Full Term starting Week 1

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

www.newcastle.edu.au

CRICOS Provider 00109J

CONTACTS

| | |
|---------------------------|---|
| Course Coordinator | Callaghan Dr Jodie Marquez Jodie.Marquez@newcastle.edu.au (02) 4921 2041 |
| Teaching Staff | Dr Dawn Simpson Dawn.simpson@newcastle.edu.au |
| School Office | School of Health Sciences Room 302, ICT Building Callaghan SchoolHealthSciences@newcastle.edu.au +61 2 4921 7053 |

SYLLABUS

| | |
|---------------------------------|---|
| Course Content | Neuroanatomical localisation of cerebral and brainstem lesions; symptomatology, especially motor/sensory changes following vascular lesions and brain damage Clinical reasoning in neurological physiotherapy practice; reasoning skills needed for interpreting the clinical examination of neurological patients and collaboratively planning their management Information gathering/history taking for patients presenting with neurological disorders Examination principles and procedures commonly used in assessing neurological disorders across the lifespan Outcome measures for neurological disorders including reliability, validity and responsiveness Stroke: aetiology, pathology, symptomatology and basic medical and surgical management, including radiological investigations Historical development of neurological physiotherapy practice Current principles of neurological rehabilitation practice; biological basis and empirical evidence for physiotherapy interventions Physiotherapeutic management of stroke patients, including motor, sensory, perceptual and behavioural/cognitive deficits Optimization of motor performance following neurological disorders; skills in training motor/sensory deficits in all functional activities following stroke Alternate approaches to the management of neurological disorders including PNF and Bobath Methods of maximizing rehabilitation intensity, volume and specificity including exercise prescription and group programs The principles and importance of primary and secondary stroke prevention and the role of physiotherapy in health promotion The psychological impact of stroke on patients and their significant others and strategies to manage these effects Availability of services in the community for stroke clients and their integration into society Role of other health professionals in team management of neurological patients across the lifespan, including team decision making |
| Course Learning Outcomes | On successful completion of this course, students will be able to: <ol style="list-style-type: none">1. Apply biomedical and behavioural scientific knowledge to the physiotherapy evaluation and management of basic neurological disorders across the lifespan;2. Describe the aetiology, epidemiology, pathogenesis and clinical presentation of stroke patients, with particular emphasis on motor and sensory problems;3. Conduct an appropriate basic examination of the neurological system in adults, including history and physical examination;4. Appropriately select, modify as necessary, and correctly demonstrate basic measurement and testing procedures commonly used in assessing neurological dysfunction;5. Understand and apply basic clinical reasoning skills and an evidence-based approach to decision making in neurological physiotherapy practice; |

6. Appropriately select, modify as necessary, and correctly demonstrate basic physiotherapeutic treatment procedures commonly used in the management of neurological dysfunction;
7. Apply basic treatment evaluation and intervention outcome processes appropriate for neurological physiotherapy practice;
8. Discuss relevant lifespan, gender, cultural, legal and ethical considerations in performing basic neurological physiotherapy evaluation and management procedures;
9. Demonstrate a developing understanding of the role of the client, carers and other health care professionals in the holistic management of neurological patients in a cultural context;
10. Effectively develop and appropriately present a critical discussion in written format to demonstrate research literacy

Course Materials

Recommended Text:

Umphred, D (ed) 2020. Neurological Rehabilitation (7th edition). St Louis. Previous editions available in the library: Q616.80562 UMPH 2001 Auchmuty: Short loan, book

Carr J & Shepherd R (2003). Stroke rehabilitation: guidelines for exercise and training to optimize motor skill. Edinburgh: Butterworth-Heinemann.

COMPULSORY REQUIREMENTS

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

Contact Hour Requirements:

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Course Assessment Requirements:

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

Pre-Placement Requirements:

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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, 5, 6, 7, 8, 9, 10 |
| 2 | Prac Viva examinations* | Week 10 | Individual | 40% | 1, 3, 4, 5, 7, 8 |
| 3 | Essays / Written Assignments | Week 5 | Pair | 20% | 1, 5, 9, 10 |

* 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 | |

| | |
|----------------------------|--------------------|
| Weighting | 40% of final grade |
| Due Date | Examination period |
| Submission Method | |
| Assessment Criteria | |
| Return Method | Not returned |
| Feedback Provided | |

Assessment 2 - Prac Viva examinations

| | |
|---------------------------------|--|
| Assessment Type | Practical Demonstration |
| Description | |
| Weighting | 40% of final grade |
| Compulsory Requirements | Pass Requirement - Students must pass this assessment item to pass the course.. |
| Due Date | Week 10 |
| Submission Method | |
| Assessment Criteria | |
| Return Method | |
| 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 - Essays / Written Assignments

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|----------------------------|-------------------------------|
| Assessment Type | Written Assignment |
| Description | 1000 word critical evaluation |
| Weighting | 20% of final grade |
| Due Date | Friday week 5 |
| Submission Method | Online /CANVAS |
| Assessment Criteria | |
| Return Method | |
| Feedback Provided | Online/CANVAS |

ADDITIONAL INFORMATION

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:
Email, face to face by appointment, CANVAS discussion board and announcements

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 for all assessment items in this course

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.

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