



Unit Outline (Higher Education)

Institute / School:	Institute of Health and Wellbeing
Unit Title:	EXERCISE PHYSIOLOGY FOR NEUROLOGICAL CONDITIONS
Unit ID:	EXPHS6013
Credit Points:	15.00
Prerequisite(s):	Nil
Co-requisite(s):	Nil
Exclusion(s):	Nil
ASCED:	061799

Description of the Unit:

This unit outlines the knowledge, skills and values to appropriately prescribe clinical exercise physiology programs for neurological conditions. Students will be required to demonstrate an understanding of a range of neurological manifestations/deficits commonly seen in specific neurological conditions. Students will be required to demonstrate appropriate clinical management and use assessment outcome measures to inform and guide exercise prescription for specific neurological conditions. Students will also learn about the pathophysiology of types of pain including the complex sequela of chronic pain.

Grade Scheme: Graded (HD, D, C, P, MF, F, XF)

Work Experience:

No work experience: Student is not undertaking work experience in industry.

Placement Component: No

Supplementary Assessment: Yes

Where supplementary assessment is available a student must have failed overall in the Unit but gained a final mark of 45 per cent or above, has completed all major assessment tasks (including all sub-components where a task has multiple parts) as specified in the Unit Description and is not eligible for any other form of supplementary assessment

Course Level:

Level of Unit in Course	AQF Level of Course					
	5	6	7	8	9	10
Introductory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Level of Unit in Course	AQF Level of Course					
	5	6	7	8	9	10
Intermediate	■	■	■	■	✓	■
Advanced	■	■	■	■	■	■

Learning Outcomes:

On successful completion of the unit the students are expected to be able to:

Knowledge:

- K1.** Explain distinct types and sources of pain including the pathophysiology of chronic pain
- K2.** Differentiate between the various physiological manifestations of neurological conditions.
- K3.** Explain the aetiology, diagnosis and related considerations for common progressive and non-progressive neurological conditions.
- K4.** Implement the principles of functional clinical exercise physiology and specific neurological clinical exercise physiology program design.
- K5.** Utilise the appropriate clinical management and exercise prescription protocols (including the role of exercise in disease management) that apply to common neurological conditions.
- K6.** Recognise common signs and symptoms associated with neurological pathologies (e.g. autonomic dysreflexia, hypotension, elevated core temperature).
- K7.** Explain the need for modifying communication strategies to improve effectiveness in common neurological conditions.

Skills:

- S1.** Demonstrate the ability to plan and design a clinical exercise physiology program to assist in the overall management of common progressive and non-progressive neurological conditions.
- S2.** Demonstrate proficiency in targeted assessment and testing procedures appropriate for specific neurological conditions.
- S3.** Demonstrate an advanced ability to design, demonstrate, implement and modify targeted exercise physiology exercises for specific neurological conditions.

Application of knowledge and skills:

- A1.** Compare and select appropriate testing procedures for clients with common progressive or non-progressive neurological conditions.
- A2.** Interpret and apply assessment/test outcome measures to inform the development and implementation of targeted and progressive clinical exercise physiology programs for the neurological conditions covered.
- A3.** Apply advanced clinical reasoning skills in determining and implementing appropriate multidisciplinary management protocols for the neurological conditions covered.

Unit Content:

- Pathophysiology of pain
 - Types
 - Chronic
- Clinical manifestations of neurological conditions
- Progressive neurological conditions (including but not limited to):
 - Motor Neuron Disease
 - Multiple Sclerosis

- Muscular Dystrophy
- Parkinsons Disease
- Non-progressive neurological conditions (including but not limited to):
 - Cerebral Palsy
 - Stroke
 - Acquired/Traumatic Brain Injury
 - Spinal Cord Injury
 - Peripheral Nerve Injury
- Principles of functional exercise physiology
 - Motor control
 - Motor abilities
 - Motor adaptation
- Neurological exercise physiology program design
- Clinical exercise physiology strategies for neurological conditions

Learning Task and Assessment:

Learning Outcomes Assessed	Assessment Tasks	Assessment Type	Weighting
K2, K3, K5 K6	Research and report on the efficacy of exercise evidence base for common neurological conditions.	Written evidence-based review.	20% - 40%
K4-K6, S1-S3, A1-A3	Completion of a practically assessed case study scenario involving assessment and prescriptive components	Practical examination	20% - 40%
K1- K4, K5, K7	Completion of online theory test covering lecture content from weeks 1-12 inclusive.	Online theory tests	20%-40%

Alignment to the Minimum Co-Operative Standards (MiCS)

The Minimum Co-Operative Standards (MiCS) are an integral part of the Co-Operative University Model. Seven criteria inform the MiCS alignment at a Course level. Although Units must undertake MiCS mapping, there is NO expectation that Units will meet all seven criteria. The criteria are as follows:

1. Co-design with industry and students
2. Co-develop with industry and students
3. Co-deliver with industry
4. FedTASK alignment
5. Workplace learning and career preparation
6. Authentic assessment
7. Industry-link/Industry facing experience

MiCS Course level reporting highlights how each Course embraces the principles and practices associated with the Co-Operative Model. Evidence of Course alignment with the MiCS, can be captured in the Course Modification Form.

MICS Mapping has been undertaken for this Unit No

Date:

Adopted Reference Style:

APA

Refer to the [library website](#) for more information

Fed Cite - [referencing tool](#)