

## MODULE DESCRIPTOR

### Module Title

Neurology In Practice

Reference	HS2138	Version	3
Created	February 2023	SCQF Level	SCQF 8
Approved	July 2018	SCQF Points	30
Amended	June 2023	ECTS Points	15

### Aims of Module

This module aims to enable the student to apply knowledge, therapeutic skills and appropriate whole person attitudes and behaviours towards the promotion of health and rehabilitation in relation to neurological conditions.

### Learning Outcomes for Module

On completion of this module, students are expected to be able to:

- 1 Relate pathological conditions to potential clinical features in individuals.
- 2 Analyse the inter-relationship between factors influencing health in relation to pathology.
- 3 Plan and apply appropriate physiotherapy assessment and treatment approaches and techniques in the management of clients with deficits in function.
- 4 Demonstrate appropriate professional and whole person attitudes towards the promotion of health in neurological conditions and key areas of potential team-working and collaboration.

### Indicative Module Content

**Neurology:** Development of the neurological system, postural control and balance mechanisms, biomechanics and systematic analysis of normal and impaired movement, development of systems of normal function including sensation, proprioception, muscle tone and development through the life span. Develop an understanding of neuroanatomy and neurophysiology. Theories of motor control and skill acquisition, feedback, neuroplasticity, muscle performance (strength, tone), motor impairments (spasticity, weakness, loss of dexterity) and the importance of repetitive task training. Introduction to cardiorespiratory issues with neurological patients.

**Pathology:** Case study analysis of neurological pathologies in development delay, neurovascular conditions, neurodegenerative conditions, acquired brain injury and peripheral nervous system pathologies, with analysis of common signs and symptoms associated with these pathologies. Develop an understanding cognitive, perceptual and communication issues in those with neurological impairment.

**Assessment skills:** Assessment of the neurological system, seating, positioning, and splinting for postural control, therapeutic and safe handling skills, comprehensive functional assessment and analysis of pathological gait. Informed consent in neurological conditions. Communication approaches and modes (verbal, non-verbal, digital), applied psychosocial considerations and the patient and carer experience in relation to neurological conditions. Sustainability and Inclusivity within assessment and management.

**Management skills:** Treatment of the trunk, upper limbs, lower limbs, balance, transfers and gait. Neurological treatment approaches. Exercise prescription and cardiorespiratory fitness. Medical management and multi-disciplinary team working in neurological conditions. Applied care and compassion to the patient and wider community.

### Module Delivery

Blended delivery comprising on campus and online learning and engagement. This will include - Workshops, Tutorials, Practicals, Seminars, Keynote Lectures, Digital Learning Resources and Simulation.

### Indicative Student Workload

	Full Time	Part Time
Contact Hours	80	N/A
Non-Contact Hours	220	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	300	N/A
<i>Actual Placement hours for professional, statutory or regulatory body</i>		

### ASSESSMENT PLAN

*If a major/minor model is used and box is ticked, % weightings below are indicative only.*

#### Component 1

Type:	Practical Exam	Weighting:	100%	Outcomes Assessed:	1, 2, 3, 4
Description:	Objective Structured Practical Exam (OSPE)				

#### Component 2

Type:	Coursework	Weighting:	0%	Outcomes Assessed:	3
Description:	This relates to a minimum of 80% mandatory attendance of all scheduled module delivery. Attendance will be assessed on a pass/unsuccessful basis.				

**MODULE PERFORMANCE DESCRIPTOR****Explanatory Text**

C1 is assessed on A-F basis and is 100% of the grade. To achieve a pass a grade D or above is required and a pass in C2 (80% module attendance)

Module Grade	Minimum Requirements to achieve Module Grade:
<b>A</b>	C1 grade A and C2 Pass
<b>B</b>	C1 grade B and C2 Pass
<b>C</b>	C1 grade C and C2 Pass
<b>D</b>	C1 grade D and C2 Pass
<b>E</b>	C1 grade E and C2 Pass
<b>F</b>	C1 grade F and/or C2 Fail
<b>NS</b>	Non-submission of work by published deadline or non-attendance for examination

**Module Requirements**

Prerequisites for Module	Successful completion of all Stage One Modules within the Master of Physiotherapy or equivalent.
Corequisites for module	None.
Precluded Modules	None.

**INDICATIVE BIBLIOGRAPHY**

- 1 RAINE, S., MEADOWS, L., AND LINCH-ELLERINGTON, M. Eds. 2009. Bobath Concept: theory and clinical practice in neurological rehabilitation. Oxford: Wiley-Blackwell.
- 2 CARR, J.H., AND SHEPHERD, R.B. 2010. Stroke rehabilitation: guidelines for exercise and training to optimize motor skill. 2nd Ed. London: Churchill Livingstone.
- 3 CROSSMAN, A., AND NEARY, D. 2019. Neuroanatomy and illustrated colour text. 6th Ed. London: Churchill Livingstone.
- 4 LENNON, S., RAMDHARRY, G., VERHEYDEN, G. 2018. Physical Management for Neurological Conditions. 4th Ed. London: Elsevier.
- 5 SHUMWAY-COOK, A. and WOOLACOTT, M., 2022. Motor Control: translating research into clinical practice. International Edition. Philadelphia: Wolters Kluwer.
- 6 McBEAN, D and WICK, F . 2012. Applied Neurosciences for the Allied Health Professional. 1st Ed. London: Churchill Livingstone.