Module Specification

Neurorehabilitation

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Contents

Part 1: Information

Module title: Neurorehabilitation

Module code: UZYSQF-30-M

Level: Level 7

For implementation from: 2023-24

UWE credit rating: 30

ECTS credit rating: 15

Faculty: Faculty of Health & Applied Sciences

Department: HAS School of Health and Social Wellbeing

Partner institutions: None

Field: Allied Health Professions

Module type: Module

Pre-requisites: None

Excluded combinations: None

Co-requisites: None

Continuing professional development: Yes

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: Not applicable

Features: Not applicable

Educational aims: See Learning Outcomes.

Outline syllabus: The syllabus includes:

Clinical neuroscience and Biomechanics:

Knowledge of functional anatomy, physiology and biomechanics applied to understand movement dysfunction and clinical conditions.

The role of neuroplasticity, motor learning and cognitive function in neurorehabilitation will be introduced and applied to clinical practice through case examples.

Contemporary research relating to clinical neuroscience will be explored and the implications upon individual practice discussed among peers.

Understanding how research informs practice:

Explore current research into the principles of neurorehabilitation and critically examine how this informs clinical practice.

Conduct critical review of current treatment approaches in neurological rehabilitation and demonstrate reflective thinking concerning the implications for clinical practice and service delivery.

Specialist clinical skills in neurorehabilitation:

Several neurological conditions will be explored and specialist rehabilitation approaches for these conditions will be introduced and critically explored.

The theory underpinning these advanced approaches will be integrated through critical appraisal of appropriate research. The role of evidence-based practice will be introduced and critically discussed among peers.

The application of specialist treatment approaches commonly used in neurorehabilitation will be introduced through practice-based workshops. These sessions will provide an opportunity for students to be familiar with the basic application of such techniques but are not a recognition of proficient clinical use.

Assessment of neurological conditions:

The pathology of complex neurological conditions will be explored and a comprehensive understanding of the clinical guidelines, service pathways, health policy which influence their treatment will be introduced.

Evidence-based practice will be promoted through critical understanding of neurological assessment methods.

The relative merits of specific neurological assessment tools will compared and critically appraised.

How to develop and assess patient centred goals and integrate them to everyday practice will be explored.

The role of the ICF in clinical practice will be explored and critically appraised.

Part 3: Teaching and learning methods

Teaching and learning methods: The learning and teaching strategy for this module is blended and uses taught face to face sessions and online learning activities. The module has been developed to provide students with the opportunity to enhance their understanding of the neuroscience processes which influence rehabilitation and to consider how therapists can effect these processes through their clinical practice. Students will be required to critically appraise research studies, treatment approaches and methods of assessment to develop a deeper understanding of the assessment and management of a range of neurological conditions.

This module builds upon the existing knowledge and practical skills that physiotherapists, occupational therapists and other health and social care professionals possess in relation to anatomy, neuroscience, neurorehabilitation assessment and management.

Student engagement will be facilitated by the provision of appropriate guided reading material and research articles all of which will be available electronically. Students will be required to undertake detailed critical appraisal of the research articles and discuss the relative merits of the research and how it may influence their practice in an on-line forum.

The practice-based learning objectives will be delivered on campus. Students will be provided with relevant research articles in preparation for these study days and will be expected to complete critical appraisal of these articles. This critical understanding is necessary to facilitate in-depth group discussion on the relative merits of the different treatment approaches which will be covered in these face to face sessions.

University-based study days will be split into theory and practical sessions. During theory sessions lectures will be delivered by expert speakers to address current/relevant evidence-based practice.

Knowledge and understanding of these specific topics will be enhanced through practical sessions, group discussion, workshops and patient interaction. The opportunity to apply knowledge acquired from lectures in supervised practical sessions will enhance clinical skills and understanding.

Scheduled learning includes lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops.

Independent learning activities will include guided reading, student-led literature reviews, interactive neuroscience material, on-line discussion and on-line quizzes. Guided reading will direct students to appropriate textbooks, journal articles and other resources which will be available electronically. Independent learning will also include hours engaged with essential reading, case study preparation, assignment preparation and completion.

These sessions constitute an average time per level. Scheduled sessions may vary

slightly depending on the module choices you make.

Contact Hours:

Contact hours will include taught sessions on campus. Students will typically receive up to 5 days of face to face teaching and it is expected each of these days will typically constitute 7 hours of teaching.

Taught sessions will integrate lectures, case-study presentations, critical debate sessions, assessment workshops and interactive practical sessions.

Delivery of these taught sessions will take place in settings such as simulation suites and will be designed to represent the clinical environment.

In addition, phone, email and discussion group contact with staff is available throughout the module typically with up to 2 hours available for tutorial/assignment/module support.

Module Learning outcomes: On successful completion of this module students will achieve the following learning outcomes.

MO1 Demonstrate an advanced knowledge and understanding of the principles of clinical neuroscience relevant to rehabilitation and how these principles apply to practice

MO2 Demonstrate an advanced knowledge of complex neurological conditions with consideration to relevant clinical guidelines, service pathways, health policy which influence service delivery

MO3 Critically evaluate and analyse contemporary research surrounding neurorehabilitation principles and practice

MO4 Critically discuss the principles and practice of specialist clinical skills used in neurorehabilitation and their role within neurorehabilitation

MO5 Demonstrate a critical understanding of the outcome measures used in neurological rehabilitation and be able to recognise the relative merits of specific

neurological assessment tools including the International Classification of Functioning (ICF)

MO6 Demonstrate a deeper knowledge of cognitive impairments commonly encountered in patients with neurological dysfunction, and their emotional and social effects

Hours to be allocated: 300

Contact hours:

Independent study/self-guided study = 263 hours

Face-to-face learning = 37 hours

Total = 300

Reading list: The reading list for this module can be accessed at readinglists.uwe.ac.uk via the following link https://uwe.rl.talis.com/modules/uzysqf-30-m.html

Part 4: Assessment

Assessment strategy: The assessment for this module will be split into two components.

Assessment task A:

This assessment task will be a 20 minute oral presentation of a case-study to demonstrate critical understanding and clinical application of a specific outcome measure used in neurorehabilitation. The presentation may be carried out in person or via virtual means. The presentation will last 15 minutes and a 5 minute period will be allocated at the end for defended questioning.

Students will have the opportunity for formative feedback on a 300 word structured abstract prior to their assessment. This abstract will complement the presentation and will be formatively assessed for critical content and structure.

Assessment task B:

This assessment task requires students to demonstrate a critical understanding of current research in a treatment approach used in neurorehabilitation and critically explore the relative merits of such an approach in practice with reference to the principles of motor learning and cognitive function. This assessment will take the form of a 3000 word essay.

Students will have an opportunity to receive formative feedback on this component during their on-site study days and via email with the module leader.

Assessment tasks:

Written Assignment (First Sit)

Description: 3000 word essay

Weighting: 60 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4, MO6

Presentation (First Sit)

Description: 20 minute presentation

Weighting: 40 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO2, MO3, MO5, MO6

Written Assignment (Resit)

Description: 3000 word essay

Weighting: 60 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4, MO6

Presentation (Resit)

Description: 20 minute presentation

Weighting: 40 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO2, MO3, MO5, MO6

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Rehabilitation {JEP}[Hainan] MSc 2022-23

Rehabilitation [DL][Glenside] MSc 2023-24