



Graduate Certificate Neurological Rehabilitation Physical Therapy Program School of Health Sciences Oakland University

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ACCREDITATION

North Central Association of Colleges and Schools

DESCRIPTION

The Graduate Certificate in Neurological Rehabilitation is designed to provide advanced theoretical and psychomotor training for physical and occupational therapists interested in specializing in the areas of neurorehabilitation and geriatrics. The GCNR will allow practicing therapists to take graduate level courses aimed at developing the specialty skills of a master clinician in treating those individuals with a neurological injury such as a stroke, multiple sclerosis, traumatic brain injury and Parkinson's disease. Physical therapists may apply the 17 GCNR credits towards completion of the post-professional DScPT degree or the post-professional MSPT degree. Occupational therapists who gain specialization in neurological rehabilitation, however, are not eligible for the DScPT.

ADMISSION REQUIREMENTS

To be eligible for admission to this program, individuals must hold an entry-level degree in physical therapy or occupational therapy and be licensed or registered in their respective disciplines (or eligible for such). Two years of clinical experiences is highly recommended. All other admissions requirements for graduate applications as determined by Graduate Admissions must also be met.

ADMISSION TERMS AND DEADLINES

Students are admitted in the fall semester only. Applications will be accepted until August 1 for the following fall semester.

APPLICATION REQUIREMENTS

The application materials and steps to be completed are:

1. Application for Admission to Graduate Study and non-refundable application fee.
2. Professional vitae or resume and one page narrative goal statement outlining academic and professional goals.
3. Official transcripts of all previous undergraduate and graduate level academic work and proof of degree.
4. Two Recommendation for Graduate Admission forms or two letters of reference.
5. Official scores for Test of English as a Foreign Language (TOEFL) and GRE from applicants who are graduates of programs taught in a language other than English.
6. International Students must meet application requirements described by Graduate Admissions.
7. Proof of licensure or registration, or eligibility for licensure or registration, in the State of Michigan. Students who do not have a license upon admission will be conditionally admitted until they provide proof of licensure. Proof of licensure is required to register for courses that require clinical hours.

REQUIREMENTS FOR THE CERTIFICATE

To fulfill the certificate requirements the student must complete, with at least a 2.0 grade in each course and an overall GPA of 3.00, a program consisting of PT 502, PT 536, PT 537, PT 538, and PT

COURSE DESCRIPTIONS

PT 502 - UNDERSTANDING EVIDENCE-BASED PRACTICE (2)

An overview of evidence-based practice and its application to examination, evaluation, diagnosis, prognosis, and intervention in physical and occupational therapy. The course will also include a review of frameworks for clinical decision making, qualitative and quantitative research designs and methods of assessing professional literature related to approaches used by healthcare professionals.

PT 536 - MOTOR CONTROL AND MOTOR LEARNING: THEORY AND APPLICATION (4)

The goal of this course is to integrate recent theories in neuroscience, motor learning, motor control, biomechanics and movement analysis in order to enhance and expedite patient recovery following neurological injury. Construction of intervention sessions and patient interaction to optimize the learning capabilities of the patient will be examined. Examination of motor control principles within functional activities will be analyzed with patient case examples common to neurological rehabilitation. Lectures, lab experiences, web materials, case studies and discussion will enhance the learning and integration of the course material.

PT 537 - FOUNDATIONS OF GERIATRIC NEUROLOGICAL PRACTICE (3)

This course reviews the pertinent physiological changes that occur with aging and their impact on the therapeutic effects of intervention with those individuals that have sustained a neurological injury. Psychosocial and cognitive aspects of aging and their influence on the recovery of the geriatric adult will be discussed. Factors affecting the patient, family, and the patient/family relationship in situation of chronic illness and loss will be examined. Learning formats will include lecture, web-based materials, case studies, and small group discussions.

PT 538 - ASSESSMENT OF NEUROLOGICAL DYSFUNCTION (4)

This course is designed to enhance the examination and evaluation skills of therapists working with individuals with neurological dysfunctions. Evidence supporting or questioning current and new neurological examination procedures will be scrutinized. A number of objective function outcome measures will be presented and appropriate utilization of these measures will be discussed. Utilization of current technology such as motion analysis systems and force plates are used to enhance and objectify the examination and evaluation of individuals with neurological dysfunction will be significant part of this class. Lecture, lab experiences, web-based material, case studies, small group problem solving and discussion will enhance the learning and integration of course material.

PT 539 - DEVELOPING INTERVENTIONS IN NEUROREHABILITATION (4)

This course examines the clinical problem-solving skills necessary for the management of functional limitations as a result of a neurological dysfunction. Specifically, the use of observations skills to identify movement deficits during functional tasks will be discussed. Evidence from a variety of sources supporting these clinical interventions will be examined. Medical management of relevant symptoms displayed by individuals with neurological dysfunction will be investigated. Integration of pre-requisite classes will assist in determining intervention for presented case studies. The format for this class will include lectures, laboratories, video-tape reviews, small-group problem-solving and discussion. Pre-requisite: PT 538.

For further information contact:

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