

Subject	PHYSIOTHERAPY IN NEUROLOGY
Study Program	Three years professional studies for graduated physiotherapist
Code	SF-311
Study Year	Third
Semester	Fifth and Sixth
Total number of classes	170
Credits	9.5
Type of subject	Obligatory
Preconditions	Fulfilled requirement to register for third year
Executed by	Chair of Neurology and Chair of Physical Medicine and Rehabilitation
Responsible Teachers	Associate Professor Gordana Kiteva-Trencheva, M.D., Ph.D. and Associate Professor Erieta Nikolikj-Dimitrova, M.D., Ph.D.
Address	Clinic for Neurology, Vodnjanska Str., No.17, Skopje, Tel. +389 2 3147 333 Institute of Physical Medicine and Rehabilitation, Elisie Popovski Str., No. 28, 1000 Skopje, tel. +389 2 3176 584, ext. 223 email: enikolic@ medf.ukim.edu.mk
Key words	Studies for physiotherapists, professional subjects, physiotherapy, neurology
Goals of study	<ul style="list-style-type: none"> ✓ To learn about the role of a physiotherapist in the multidisciplinary treatment of patients with neurological disorders ✓ To comprehend and apply the physiotherapeutic methods to patients with neurological disorders
Class descriptions (brief content)	<p>Theoretical instructions (30 lessons):</p> <ul style="list-style-type: none"> - Role of a physiotherapist - Profile of a patient with neurological disorders - Principles of functional assessment and measuring the outcomes - Disorder in the muscle tonus and movement - Physiotherapeutic methods in: <ul style="list-style-type: none"> - Stroke - Traumatic brain injuries - Spinal cord injuries - Coma - Injuries and disorders of peripheral nerves - Multiple sclerosis - Parkinson's disease - Huntington's disease - Motor neuron diseases - Polyneuropathies - Muscle disorders - Physiotherapeutic methods in neurological sufferings in adults with onset in the childhood - Physiotherapeutic treatment of pain

	<p>- Application of orthopedic devices in rehabilitation of the patients with neurological diseases and injuries</p> <p>Practical instruction (40 lessons): Training of a physiotherapist to apply exercise therapy in patients with neurological diseases or conditions after spinal, head or peripheral nerve injury</p> <p>Training of a physiotherapist to apply orthopedic devices in the rehabilitation of patients with neurological diseases or conditions after spinal, head or peripheral nerve injury</p> <p>Practice (100 classes): Practice is mandatory and is carried out in the Institute of Physical Medicine and Rehabilitation under guidance of a mentor-teacher and physiotherapist responsible for that department. The student is obliged to engage in all activities in the field of physiotherapy in the course of the full-time working hours and keep a log of its activities</p>														
Organization	Theoretical instruction: 30 lessons Practical instruction: 40 lessons Practice: 100 classes														
Methods of Learning	Lectures, practical lessons, practice (practical training)														
Provided results of study	<p>Knowledge and understanding: The student will acquire knowledge and comprehension for the physiotherapeutic methods applied in patients with neurological disorders and diseases.</p> <p>Key skills: The student will be able to apply the acquired theoretical knowledge in practice.</p>														
Specific teaching recommendations	<p>The student is obligated to take part in all provided activities, including participation in continuous knowledge examinations in order to get a signature.</p> <p>Ranking the student's activities:</p> <table border="1"> <thead> <tr> <th>Kind of activity</th><th>Points</th></tr> </thead> <tbody> <tr> <td>Theoretical instruction*</td><td>7.5 - 15</td></tr> <tr> <td>Practical instruction**</td><td>8 - 16</td></tr> <tr> <td>Practice***</td><td>7.5 - 15</td></tr> <tr> <td>Continuous examinations-2</td><td>25 - 40</td></tr> <tr> <td>Practical examination</td><td>12-16</td></tr> <tr> <td>In total:</td><td>60-100</td></tr> </tbody> </table> <p>* Presence at theoretical instruction: 51% - 60% - 7.5 points 61% - 70% - 9.5 points</p>	Kind of activity	Points	Theoretical instruction*	7.5 - 15	Practical instruction**	8 - 16	Practice***	7.5 - 15	Continuous examinations-2	25 - 40	Practical examination	12-16	In total:	60-100
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	<p>71% - 80% - 12 points 81% - 90% - 13 points 91% - 100% - 15 points</p> <p>** Practical instruction: every practical lesson brings 0.4 point (40 exercises) presence – 0.2 points activity at the exercise – 0.2 points</p> <p>*** Results of the practice 51% - 60% - 7.5 points 61% - 70% - 9.5 points 71% - 80% - 12 points 81% - 90% - 13 points 91% - 100% - 15 points</p> <p>Criteria as a condition: The student is required to regularly attend theoretical and practical lectures in order to approach continuous checks. Knowledge examinations are written and/or oral. The practical part of the examination is carried out after completion of the practice and consists of checks in the practical knowledge and the result of the log book kept by the student, result of the behavior and the engagement of the student. The grade for the entire examination is obtained according to the table of results, based on the sum of the points achieved for all the activities, including the continuous checks and practical part of the examination. The student is obliged to achieve minimum points (60%) of the continuous examinations (colloquiums) and the practical examination, otherwise he/she takes the complete final examination.</p> <p>Complete Final Examination: The examination is written and/or practical. It consists of continuous checks and/or the practical part of the examination of which the student has failed to obtain the minimum required points.</p>
Teaching aids	<p>Basic: Lectures approved by the Chair. Additional: - Edwards S. Neurological Physiotherapy, 2nd Edition. Churchill Livingstone, 2001. - DeLisa JA, Rehabilitation medicine. JB Lippincott, Philadelphia, 2005</p>