



LITHUANIAN SPORTS UNIVERSITY

STUDY MODULE PROGRAMME (SMP)

Module Code	B	710	B	127	Accredited until				Renewal date		
	Branch of Science		Progr.	Registr. №.							

Entitlement

Physiotherapy in Neurology

Prerequisites

Anatomy, pathology, movement control, general physiotherapy

Main aim

Be able to examine a neurological patient, assess their problems, formulate physiotherapy goals, create a treatment plan, and apply physiotherapy methods and tools. Be able to evaluate the effectiveness of physiotherapy.

Provided knowledge and abilities

Will know the structure and functions of the nervous system, neurological disorders of muscle strength and tone, reflexes, sensations, movement coordination, balance and gait, cognitive and perceptual functions, and will be able to examine a neurological patient, determine a physiotherapy diagnosis, create and apply a physiotherapy program, and evaluate its effectiveness.

Summary

Knowledge of neurological pathologies, problem-solving methods using physiotherapy measures. Specifics of physiotherapy for nervous system diseases and injuries, examination and assessment of neurological patients, determination of the need for physiotherapy, and establishment of physiotherapy conclusions/diagnoses.

Level of module

Level of programme		Subject group (under the regulation of the area)
Cycle	Type	
First	Bachelor	Specialaus lavinimo

Group under financial classification

9.Reabilitacija ir slauga, sportas (išskyrus trenerius)

Syllabus

№.	Sections and themes	Responsible lecturer
1.	Introduction to physiotherapy for neurological patients	
2.	Structure and concepts of physiotherapist 's practice	
3.	Clinical thinking in physiotherapy of neurological patients	
4.	Normal movement and its components. Analysis of body positions and movementse	
5.	Neurological disorders	
6.	Neuroanatomy: Structure and circulation of the blood in the brain. Cranial nerves and testing. Brain plasticity.	
7.	Cerebrovascular disease. Ischemic and hemorrhagic stroke. Physiotherapy after a stroke.	
8.	Neuroanatomy: Spinal cord and their injuring syndromes. Physiotherapy examination.	
9.	Peripheral nerves of the upper limb. Peculiarities of physiotherapy in patients with peripheral nerve injuries.	
10.	Peripheral nerves of the lower limb. Peculiarities of physiotherapy in patients with peripheral nerve injuries.	
11.	Facial paralysis and physiotherapy.	
12.	Cognition, perception disorders and physiotherapy	
13.	Coordination system, movement coordination disorders and physiotherapy	
14.	Somatosensory system, its disorders and physiotherapy	
15.	Infectious diseases of the nervous system. Nervous system injuries. Head and spinal cord injuries.	

№.	Sections and themes	Responsible lecturer
16.	Demyelinating diseases: multiple sclerosis. Neuromuscular disease.	
17.	Hereditary degenerative nervous system diseases. Parkinson's disease, Alzheimer's disease.	
18.	Deep, superficial, pathological reflexes	
19.	Examination and treatment of a neurological patient (functional approach). Case study	
20.	Physiotherapy after spinal cord injuries.	
21.	Prevention of complications in the early stage of neurological diseases	
22.	Modern methods of neurorhabilitation	

Teaching/learning methods:

Lectures, exercises, demonstrations, group work, visual materials, case studies. Assessment of knowledge and skills: A ten-point grading scale and cumulative evaluation scheme are applied. Tasks completed during the semester, both in class and independently, as well as acquired knowledge and skills, are assessed with a cumulative grade – CG (usually assessed before the exam session by summing up separate evaluation components multiplied by their weighted coefficient), if the module does not include an exam. If an exam is included, no more than 50% of the final grade can be accumulated from coursework during the semester, with the remaining portion being assessed during the exam. The final grade is determined by summing the cumulative and exam parts."

Evaluation procedure of knowledge and abilities:

References

№.	Title	Edition in Lithuanian Sports University library		In Lithuanian Sports University bookstore	Number of ex. in the methodical cabinet of the depart.
		Pressmark	Number of exemplars		
1.	Neurological physiotherapy : bases of evidence for practice: treatment and management of patients described by specialist clinicians / ed. by Cecily Partridge. London : Whurr Publishers, 2003.			No	
2.	Neurological physiotherapy: a problem-solving approach / ed. by Susan Edwards. Edinburgh : Churchill Livingstone, 2002.			No	
3.	Stroke rehabilitation : guidelines for exercise and training to optimize motor skill / Janet H. Carr, Roberta B. Shepherd. Oxford : Butterworth-Heinemann, 2004.			No	
4.	Neuroscience: Fundamentals for Rehabilitation / Laurie Lundy-Ekman. Philadelphia: W. B. Saunders company, 2002			No	
5.	Manter & Gatz's Essentials of Clinical Neuroanatomy and Neurophysiology / Sid Gilman and			No	
6.	Clinical Neuroanatomy / Richard S. Snell. Philadelphia: Lippincott Williams & Wilkins, 2001			No	
7.	Neurological Rehabilitation: optimizing motor performance / Janet Carr, Roberta Shepherd. Oxford : Butterworth-Heinemann, 2000			No	
8.	Adult Hemiplegia: Evaluation and Treatment / Berta Bobath. Oxford: Butterworth-Heinemann, 1990.			No	
9.	PNF in Practice: an illustrated guide / Susan S. Adler, Dominiek Beckers, Math Buck. Berlin: Springer, 2000.			No	

