

COURSE INFORMATION SHEET

University: Catholic University in Ružomberok	
Faculty: Faculty of Health	
Course code: KFYZIO/54F1031W/17	Course title: Kinesiology and Pathokinesiology 1
Type and range of planned learning activities and teaching methods: Form of instruction: Lecture Recommended study range: hours weekly: 2 hours per semester: 24 Teaching method: on-site (distance method according to the document Príkaz rektora P-8/2020 since 15. 10. 2020)	
Credits: 3	
Recommended semester/trimester: 3.	
Level of study: I.	
Prerequisites:	
Requirements for passing the course: Conditions for passing the subject: The controlled self-study is carried out by assigning and elaboration of the final semestral work and its presentation, forms 10% of final rating. During the semester: continuous writing inspection, from which is necessary to get 60% points. Final rating will be based on successfully mastered writing inspection and verbal exam. Subject rating: A – 100%-93% B – 92%-85% C – 84%-77% D – 76%-69% E – 68%-60% FX – 59%- 0%	
Learning outcomes of the course: Learning outcomes: The aim of the subject: To understand and to acquire the principle of movement control. To gain the overview and to understand function of the joints, thorax, spine. To recognize malformation and malfunction. To understand the walking stereotype and pototype activities and engagement of the skeletal muscles to muscle chains. Theoretical knowledge: Student analyzes the engagement of skeletal muscles to muscle chains. Identifies pathological patterns and stereotypes. Describes the motion control of central and peripheral nervous system. Identifies and evaluates the impact of central nervous system disorders at performing will movements. Practical skills: Student performs the kinesiological analysis. Assesses a degree of damage of will movement. Documents the deviations from physiology. Suggests kinesiotherapeutic plan and programe for renewal of will movement.	

Course contents:

Brief subject scheme:

1. Movement as the basic manifestation of living, movement behavior, the impact of movement for life processes, external environment and society, relationships, sport and motion compensation.
2. Connective tissues structure and function: ligament, cartilage, bone. Morphology, physiology, growth and evolution, nutrition, biomechanics, defects and regeneration of individual tissue types.
3. Continuous and contact bone connections – structure, movements.
4. Individual joint parts biomechanics nutrition, innervation, joint afference.
5. Pathological changes and individual joint parts regeneration.
6. Muscle tissue- structure, action potential and muscle tissue contraction mechanism, myoneural disc, types of muscle tissue.
7. Skeletal muscle- structure, muscle and bone connection.
8. Bursas, sheaths, fascias, vascular supply, sensory organs and nerve endings in the muscle, muscle tension and muscle consistency.
9. Functions of muscle tissue in pathological conditions, regeneration abilities.
10. Neuron, body, protrusions, receptor, conductive and exciting membrane.
11. Depolarization, excitement, synapse, integration and coding function of the neuron.
12. Output part of the cell, effector, metabolic neuron requirements, damage and possibilities of regeneration of nervous tissue.

Recommended or required literature:

1. DYLEVSKÝ, I.: Kineziológia. Triton, Praha 2009
2. DYLEVSKÝ, I.: Obecná kineziológia. Grada, Praha 2009
3. GÚTH, A. a kol.: Vyšetrovacie metodiky v rehabilitácii pre fyzioterapeutov, LIEČREH GÚTH Bratislava.
4. KOLÁŘ, P.: Rehabilitace v klinické praxi. Galen, Praha 2010.
5. VÉLE, F.: Kineziológia. Triton, Praha 2006

Language of instruction:

Slovak language

Notes:

The course is taught only in the winter semester and is evaluated only in the relevant examination period of the winter semester of the academic year.

Course evaluation:

Assessed students in total: 123

A	B	C	D	E	FX
26.02	27.64	18.7	15.45	12.2	0.0

Name of lecturer(s): prof. MUDr. Anna Lesňáková, PhD., Mgr. Alexandra Melišová

Last modification: 11.03.2021

Supervisor(s): doc. PhDr. Zuzana Hudáková, PhD.