

Level: bachelor				
Course title: Physics of the Human Body				
Status: obligatory				
ECTS: 7				
Requirements: Basics of Human Anatomy				
Learning objectives The objective is to qualify students for understanding the application of physical laws and concepts to the human body.				
Learning outcomes Students should acquire knowledge and ability for individual and team scientific research work in the field of applying physical concepts to the human body. The specific competences are, for example: - interpretation of human body as a physical system with special characteristics (cybernetic thermodynamic), - application of physical laws to a certain human body systems (locomotor system, cardiovascular system, nervous system), etc.				
Syllabus <i>Theoretical instruction</i> Topics include human body as a cybernetic system; feedback and control; biomechanics; thermodynamics of human body; fluid pressure, fluid flow in the body; physics of the heart: the cardiovascular system; electrical and magnetic properties of the human body; physics of sound, speech and hearing; physics of the eyes and vision. <i>Practical instruction</i> Practical classes are held at the appropriate departments of the Medical Faculty.				
Weekly teaching load				Other:
Lectures: 3	Exercises: 1	Other forms of teaching:	Student research: 1	