
		UNIVERSITY OF EAST SARAJEVO Faculty of Medicine					
		Study program: medicine					
		Integrated academic studies		I study year			
Full subject title		BIOPHYSICS					
Department		Department for preclinical subjects, Faculty of Medicine in Foca					
Subject code			Subject status		Semester		ECTS
ME-02-2-010-2			elective		II		1
Professor/ -s		assoc. prof. Milan Kovacevic, PhD					
Associate/ -s							
Number of lectures/ teaching workload (per week)			Individual student workload (in hours per semester)			Coefficient of student workload S₀¹	
L	E	SP	L	E	SP	S₀	
1	0	0	1*15*1	0*15*1	0*15*1	1	
total teaching workload (in hours, per semester)				total student workload (in hours, per semester)			
1*15 + 0*15 + 0*15 =15				1*15*1 + 0*15*1 + 0*15*1 = 15			
Total subject workload (teaching + student):15 + 15= 30 hours per semester							
Learning outcomes		1. Adoption of basic concepts on the physical laws of the functioning of the human organism. 2. Getting a good base for understanding physiology, cardiology, neurology, oftamology, radiology, etc. 3. Acquisition of elementary knowledge from modern biophysics as the basis for application in modeling in medicine. 4. Acquiring operational knowledge for students to independently find, read and understand the latest professional and scientific papers from biomedical research as well as to independently solve some problems in biophysics.					
General competences		They have acquired a systemic thinking approach as well as a structured approach to medical problems during their education. They are capable of acting in accordance with rational and scientific concepts and principles. They have an unbiased attitude towards new scientific methods in medicine.					
Preconditions		No preconditions					
Teaching methods		Lectures and seminar papers					
Subject content per week		Lectures: 1-2. Biomechanics of the locomotor system of man 3-4. Biomechanics of the cardiovascular system 5-6. Therodynamics of the human organism 7-8. Transport processes in the human organism 9-10. Bioelectric processes in the human organism 11-12. Bioacoustics 13-14. Lightness in medicine - physics of eye and vision 15. Seminars					
Compulsory literature							
Author/s		Publication title, Publisher			Year	Pages (from-to)	
Stankovic, S.		Fizika ljudskog organizma, PMF Novi Sad			2006		
Additional literature							
Author/s		Publication title, Publisher			Year	Pages (from-to)	
P.I. Herman		Physics of the human body, Springer-Verlag, Berlin Heidelberg			2007		
Student responsibilities, types of student assessment and grading		Grading policy				Points	Percentage
		Pre-exam activities					
		seminar paper				50	50%
		Final exam					
		test				50	50%

¹ Coefficient of student workload S_o is calculated as it follows:

a) for the study programs not going through the licensing process: $S_o = (\text{total workload in semester for all the subjects } 900 \text{ hrs} - \text{total teaching workload } L+E \text{ in semester for all the subjects } 870 \text{ hrs}) / \text{total teaching workload } L+E \text{ in semester for all the subjects } \text{ hrs} = \text{ }.$ Consult form content and its explanation.

b) for the study programs going through the licensing process, it is necessary to use form content and its explanation.

	TOTAL	100	100 %
Certification date	June 17 th 2024		