

	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-01-2-010-2		elective		II	1	
Professor/ -s		associate. professor. 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.				
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)	
Hobbie, Russell K., Roth, Bradley J		Intermediate Physics for Medicine and Biology", Springer		2015.		
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				
		Written test			50	50%
TOTAL			100	100 %		

¹Coefficient of student workload S₀ is calculated as it follows:

a) for the study programs not going through the licensing process: S₀ = (total workload in semester for all the subjects 900 hrs – total teaching workload L+E in semester for all the subjects 870 hrs)/ total teaching workload L+E in semester for all the subjects ____ hrs = _____. Consult form content and its explanation.

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

Certification date

December 13 th 2018