

Study Program: Biology			
Type and level of studies: Bachelor studies			
Course name: Physics			
Lecturer: Adrović D. Feriz			
Status: Compulsory			
ECTS: 5			
Attendance Prerequisites: none			
Course aims Introducing biology students to the selected physics topics relevant for the existence of living matter at all levels– molecular, cellular and supracellular – including the biosphere as a whole. Understanding the laws of physics and the methodology of natural sciences aids in understanding the singularity of the living world.			
Course outcome The students have grasped the fundamental laws of physics and physical phenomena, contemporary theoretical concepts and experimental achievements in biophysics on which the processes, procedures and methods of modern biology are based.			
Course content <i>Theoretical part:</i> The fundamentals of metrology in biophysics. Basic concepts of biomechanics. Bioelectrical phenomena. Basic functions of biological membranes. Basic concepts of atomic physics and the molecule. Ionizing and non-ionising radiation in nature. Biologically significant fission and activating radionuclides. Dosimetry and radiation protection. <i>Practical part: exercises, other forms of teaching, research work.</i> Experimental exercises in classical and radiation physics are conducted in the laboratory and in the field.			
Literature 1. Feriz Adrović, Osnovi biofizike, (manuscript); 2. Dejan Raković, Osnovi biofizike, Gros knjiga, Beograd, 1995; 3. M.V.Volkenštajn, Biofizika, Nauka, Moskva, 1981.			
Number of active classes			Other classes
Lectures: 2	Practical classes: 2	Other forms of teaching:	
Teaching methods: Classes are realised through lectures and exercises. Attendance and active participation are mandatory for all students. This includes solving specific tasks and problems, as well as a broader discussion.			
Assessment (maximum 100 points)			
Course Assignments	points	Final exam	Points
Activity during lectures	10	Written exam	50
Practical classes	20	Oral exam	
Term tests	20	
Seminars			
Total	50		50