

## Course description

### Part 1

General information about the course			
1. Major of study: medicine		2. Study level: unified MSc	
		3. Form of study: intramural	
4. Year: III		5. Semester: V	
6. Course name: Biophysics			
7. Course status: required			
8. Course objectives			
Is able to define selected biophysical concepts and knows the selected laws of physics.			
Knows the role of physical and biophysical environmental factors in the creation, development and shaping of the phenomenon of life.			
Knows the mechanisms and effects of the impact of physical and biophysical environmental factors (natural and artificially created by man) on the human body at various stages of its development and different periods of life.			
Knows the biophysical foundations of organs and organ systems of the human body and other living organisms.			
Knows the theoretical foundations and uses in practice laws and physical phenomena and biophysical regularities (in medical diagnostics, prevention and treatment). Knows the principles of functioning of diagnostic and therapeutic equipment (on selected examples).			
Knows selected measuring instruments and physical apparatus.			
Understands and applies in practice selected concepts and laws of physics and biophysics			
Uses the laws of physics and biophysics to describe issues in the field of cell and tissue biology and physiological processes.			
Learning outcomes / reference to learning outcomes indicated in (underline as appropriate): <u>education standards (Regulation of the Ministry of Science and Higher Education)</u> / Resolution of the Senate of the Medical University of Silesia (indicate terms specified in education standards / signs of learning outcomes approved by the Resolution of the Senate of the Medical University of Silesia)			
For knowledge student knows and understands: B.W5,B.W6,B.W7,B.W8, B.W9			
For skills student can do : B.U1,B.U2,B.U9, B.U13			
For social competencies student is ready to: K.4			
9. Number of hours for the course		15	10. Number of ECTS points for the course
			1
11. Form of evaluation: exam			
12. Methods of verification and evaluation of learning outcomes			
Learning outcomes	Methods of verification		Methods of evaluation*/ credit
Knowledge	Continuous observation		*
	Oral answer		
	Test		
	Summary methods:		
	Test / Written exam / test exam		
Skills	Continuous observation		*
	Oral answer		
	Test		
	Summary methods:		
	Test / Written exam / test exam		
Competencies	Observation		*

\* For exams and grade credits the following evaluation system has been assumed:

**Very good (5,0)** – the assumed learning outcomes have been achieved and significantly exceed the required level

**Better than good (4,5)** – the assumed learning outcomes have been achieved and slightly exceed the required level

**Good (4,0)** – the assumed learning outcomes have been achieved at the required level

**Better than satisfactory (3,5)** – the assumed learning outcomes have been achieved at the average required level

**Satisfactory (3,0)** – the assumed learning outcomes have been achieved at the minimum required level

**Unsatisfactory (2,0)** – the assumed learning outcomes have not been achieved