

Subject card: Biochemistry with elements of chemistry

General information about the subject		
1. Field of study: Medical Program		2. Level of studies: uniform master studies 3. Semester: according to the schedule
4. Name of subject: Biochemistry with elements of chemistry		
5. Subject content and associated learning outcomes Biochemically important compounds of living organisms - structure and functions; basic catabolic pathways and anabolic, the ways of their regulation and the influence of genetic and environmental factors on them; respiratory cycle; acid-base and water-electrolyte balance; vitamins; enzymes; coenzymes; the basics of nutrition; free radicals and oxidative stress - influence on cells and importance in the pathogenesis of diseases and aging processes; antioxidants; metabolism of carbohydrates, lipids, proteins; metabolism of purine and pyrimidine nucleotides; organ biochemistry; exercise biochemistry; biochemical basis of atherosclerosis and other civilization diseases; basics of selected instrumental methods used in biomedical research and examples of their application in medical diagnostics; laboratory exercises, including selected blood tests, analysis of gastric juice, urine analysis; basic laboratory techniques; operation of simple measuring instruments and evaluation of the accuracy of measurements; using databases, including online ones, and searching for necessary information using available tools; critical analysis of the literature		
Form of approval:		EXAM
6. Amount of hours intended for subject		90
7. Amount of ECTS points intended for subject		6

According to the regulations of the subject, Resolution of the Rector No. 75/2016 with further amendments the grade obtained means that:

Very good (5,0) - the assumed learning outcomes have been achieved and largely 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 were achieved on the required level

better than satisfactory (3,5) – the assumed learning outcomes were achieved on the average required level

satisfactory (3,0) - the assumed learning outcomes were achieved at the minimum required level

unsatisfactory (2,0) – the assumed learning outcomes were not achieved.