

Course title	Basic Biochemistry		
Course code	Semester	ECTS	Lectures/ classes
13.1.1450	summer	2	Lectures: 15 hours
Name of the lecturer and contact	prof. UG, dr hab. Joanna Skórko-Glonek; dr hab. Ewa Laskowska, profesor uczelni; joanna.skorko-glonek@ug.edu.pl		
Prerequisites	Basic knowledge of inorganic and organic chemistry		
Course description	<p>The overall goal of this course is to gain a basic knowledge of the structure and function of macromolecules (proteins, nucleic acids, carbohydrates, lipids) and main biochemical processes.</p> <p>Structure of proteins, nucleic acids, carbohydrates and lipids. Function of selected proteins. Enzymes-kinetics, catalytic and regulatory strategies. Main metabolic pathways: glycolysis and gluconeogenesis, citric acid cycle, oxidative phosphorylation, pentose phosphate pathway, lipid metabolism. Regulation and integration of metabolic pathways.</p>		
Learning outcomes	<p>Knowledge: describes the structure and properties of basic types of biological macromolecules and molecular mechanisms and regulation of the basic metabolism pathways</p> <p>Skills: learns independently, in a targeted manner, can use biochemical terms in a way that is comprehensible and accessible for specialists, as well as people outside the group of specialists</p>		