

Module name:	<b>Biochemistry 1</b>	
ECTS:	<b>4</b>	
Learning effects	Course outcomes:	
Knowledge:	1	Student knows and understands the role of micro- and macro-elements in physiological conditions of organism
	2	Student knows and understands the structure and properties of the main types of biochemical compounds: carbohydrates, amino acids, proteins, lipids, porphyrins, nucleic acids and vitamins
	3	Student knows and understands the consequences of deficiencies of micro/macro-elements and vitamins in animals and humans
	4	Student knows and understands the role of the main types of biochemical compounds: carbohydrates, amino acids, proteins, lipids, porphyrins, nucleic acids and vitamins in organism
	5	Student knows and understands the specific functions of nucleic acids in terms of biochemical reactions involved in the processes of replication, transcription and translation
Skills:	1	Student is able to identify specific groups of biochemical compounds based on characteristic reactions
	2	Student is able to use the main laboratory techniques, such as: qualitative analyses, titration, colorimetric measurements, chromatography
	3	Student is able to identify the properties of specific biochemical compounds based on characteristic reactions
	4	Student is able to perform qualitative and quantitative analyses of investigated compounds
Competences:	1	Student is ready to share his/her knowledge and practical skills with other team members
	2	Student is ready to interpret results obtained and make conclusions based on performed analyses or observations, and is able to explain the results in a clear and factual manner using arguments based on available scientific literature regarding veterinary sciences
	3	Student is critical to knowledge and understands the necessity of constant education using the most up to date data and publications
	4	Student is ready to use knowledge and skills in further steps of education
Objectives of the module required to obtain learning effects:	The aim of the first part (semester) of Biochemistry course is to teach students about the structure and properties of biochemical compounds (vitamins, carbohydrates, lipids, amino acids, proteins, nucleic acids, porphyrins) and necessary macro-, and microelements. During the practical part of the course students are performing qualitative and quantitative analyses to detect the presence and properties of the studied biochemical compounds.	
Assessment methods:	7 short tests, 3 written tests	