

THE LIST OF STUDENTS INDEPENDENT WORK TOPICS
 to discipline “Biological chemistry” for 2nd year students of pharmaceutical faculty, speciality «Pharmacy»
 and «Clinical pharmacy» 2017-2018 academic years

№	Themes	Time(h)
1	Place of biochemistry among biomedical disciplines. History of biochemistry	2
2	Proteins - the basis of life	2
3	History of enzymology development	2
4	Medical applications of enzymes: enzymotherapy, enzymodiagnosics	4
5	Coenzyme vitamins and their biological forms	4
6	Uses of coenzymes in medical practice	4
7	History of the discovery and biological value of Citric Acid Cycle	4
8	The life and works of famous Ukrainian biochemists O.M.Bah and V.I.Palladin	2
9	Disconnectors of oxidative phosphorylation and thermogenesis regulation	2
10	Biochemical mechanisms of carbohydrates digestion and absorption. Causes of carbohydrates food intolerance.	2
11	History of glycolysis discovery and the contribution of Ukrainian scientists in its researche	2
12	Inherited disorders of carbohydrate metabolism: fruktosemia, galactosemia, abnormalities of glucose-6-phosphate dehydrogenase activity	4
13	Pathogenesis and treatment of diabetes: current views	4
14	Biological values of polyunsaturated fatty acids	4
15	Pharmaceuticals as lipotropic factors: examples and mechanisms of action	4
16	Reasons and effects of acetonemia by diabetes mellitus	4
17	Biochemical diagnosis intensity of proteins putrefaction in the intestine	4
18	Monoamine oxidase inhibitors as drugs	2
19	Diagnostic value of transaminases activity determinations	2
20	Inherited disorders of urea synthesis cycle	2
21	Enzymopathies amino acids metabolism	4
22	Disorders of purine metabolism. Prevention and treatment of gout	4
23	Effect of drugs on the structure and functions of nucleic acids	4
24	Pharmaceuticals - inhibitors of translation: Examples, mechanisms of action.	4
25	Modern aspects of genetic engineering to solve the problems in pharmacy	4
26	Using polymerase chain reaction for the diagnosis of hereditary and infectious diseases	2
27	History of endocrinology	2
28	Pathology of thyroid hormones synthesis and secretion	4
29	Insulin: the structure, history of discovery, medical use, artificial synthesis.	4
30	Vitamin C: structure, biological role, medical applications	2
31	Medical applications of coenzyme vitamins	2
32	Blood components as pharmaceuticals	4
33	Pathobiochemistry of jaundices	4
34	Ways of drugs detoxification as xenobiotics	4
35	Effects of pharmaceuticals induced toxicity, its mechanisms and consequences	2
36	Biochemical indices of water-mineral metabolism abnormalities	2
	Total	116

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