

*Approved*  
*Vice-Chancellor for Academic Affairs*  
*Prof. Guminsky U.I.* \_\_\_\_\_  
*Date* \_\_\_\_\_ *2017*

**THEMATIC–CALENDAR PLAN  
OF PRACTICAL LESSONS  
FROM BIOORGANIC CHEMISTRY**

***For I-st Year Foreign Students of the Medical Faculty  
2017 year, Semester II***

| <i>No</i>                      | <i>Theme of the practical lessons</i>  | <i>Weeks</i> | <i>Hours</i> |
|--------------------------------|--|--------------|--------------|
| <b><i>Content module 1</i></b> |  |              |              |
| 1                              | Nomenclature, nature of chemical bonds in organic compounds.   | 9-13.01      | 2            |
| 2                              | Isomerism in organic compounds.  | 16-20.01     | 2            |
| 3                              | Electronic effects. Acidity and basicity of organic compounds.   | 23-27.01     | 2            |
| 4                              | Reaction ability of alkanes, alkenes, arenes.  | 30.01-3.02   | 2            |
| 5                              | Reaction ability of aldehydes and ketones.   | 6-10.02      | 2            |
| 6                              | Reaction ability and biological meaning of carboxylic acids.   | 13-17.02     | 2            |
| 7                              | Reaction ability and biological meaning of oxy- and oxoacids.  | 20-24.02     | 2            |
| 8                              | HFA. Lipids. Phosphoglycerides.  | 27.02-3.03   | 2            |
| <b><i>Content module 2</i></b> |  |              |              |
| 9                              | Structure and chemical properties of $\alpha$ - amino acids.   | 6-10.03      | 2            |
| 10                             | Classification of amino acid. Reaction ability of amino acid in human body.  | 13-17.03     | 2            |
| 11                             | Physical-chemical properties of proteins. Structure organization of proteins.                                      | 20-24.03     | 2            |
| <b><i>Content module 3</i></b> |  |              |              |
| 12                             | Monosaccharides, structure and chemical properties.  | 27-31.03     | 2            |
| 13                             | Oligo- and polysaccharides, structure and chemical properties.   | 3-7.04       | 2            |
| <b><i>Content module 4</i></b> |  |              |              |
| 14                             | Heterocyclic compounds, classification, structure, chemical properties. Nucleic acids, structure, biological role. | 10-14.04     | 2            |
| 15                             | Practical skills. The final module of Bioorganic chemistry   | 17-21.04     | 2            |

***Head of the Biological  
and General Chemistry Department***

***d.med.s., docent Zaichko N.V.***