

*Summary of the working program of the academic discipline*

**«Basics of pharmacogenetics»**

General Educational Program of higher education 31.05.03 Dentistry

Department: general and clinical pharmacology\_\_\_\_\_

**1. The purpose of mastering the discipline - participation in the formation of relevant competencies: UC-1 (IUC-1.2, IUC-1.3), PC-7 (IPC-7.1)**

**2. Position of the academic discipline in the structure of the General Educational Program (GEP).**

**2.1.** The discipline refers to the additional part of Block 1 of GEP HE.

**3. Deliverables of mastering the academic discipline and metrics of competence acquisition**

Mastering the discipline aims at acquiring the following universal (UC) and general professional (GPC) and professional (PC) competencies

#	Code of competence	Content of the competence (or part of it)	Code and name of the indicator of achievement of competence	As a result of studying the discipline students must:		
				know	be Able to	possess
1	UC-1	is Able to carry out a critical analysis of problem situations on the basis of a systematic approach to develop a strategy of action	IUC 1.2. Knows how to acquire new knowledge on the basis of analysis, synthesis, etc.; to collect data on complex scientific issues related to the professional field; to search for information and solutions on the basis of action, experimentation and experience IUC 1.3 Has practical experience in the study of problems of professional activities with the use of analysis, synthesis and other methods of intellectual activity;	<ul style="list-style-type: none"> <li>• basic concepts of clinical pharmacogenetics;</li> <li>• genetic factors affecting the pharmacokinetics of medicinal products (drugs); features of pharmacokinetics and pharmacodynamic s of medicinal products depending on the genetic polymorphism of the population</li> </ul>	<ul style="list-style-type: none"> <li>• analyze the effect of drugs on the totality of their pharmacological properties and the possibility of using drugs for treatment in the future Based on the genetic polymorphism of the population</li> </ul>	<ul style="list-style-type: none"> <li>• practical experience in pharmaceutical information and consultation during the release and sale of drugs taking into account the genetic polymorphism of the population</li> </ul>

			developing action strategies for solving professional problems			
2	PC-7	is Able to <u>apply drugs</u> and medical devices <u>in the provision of medical assistance in emergency and emergency forms</u>	<p>IPC 7.1. Knows: modern methods of use of medicines for diseases and conditions in accordance with the applicable procedures of medical care, clinical recommendations (treatment protocols) on the provision of medical care to meet the standards of medical care in the provision of medical assistance in emergency and emergency forms; the mechanism of action of drugs, medical indications and contraindications for their use; complications caused by their use of</p> <p>PCI 7.2. Able to prescribe drugs with consideration of diagnosis, age and clinical picture of the disease in accordance with the applicable procedures of medical care, clinical recommendations (treatment protocols) on the provision of</p>	<ul style="list-style-type: none"> <li>• basic concepts of clinical pharmacogenetics;</li> <li>• genetic factors affecting the pharmacokinetics of medicinal products (drugs); features of pharmacokinetics and pharmacodynamic of medicinal products depending on the genetic polymorphism</li> </ul>	<ul style="list-style-type: none"> <li>• of the population. the effect of drugs on the totality of their pharmacological properties and the possibility of using drugs for treatment depending on the genetic polymorphism of the population</li> </ul>	<ul style="list-style-type: none"> <li>• practical experience in pharmaceutical information and consultation during the release and sale of drugs taking into account the genetic polymorphism of the population</li> </ul>

		medical assistance in emergency and emergency forms			
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#### 4. Volume of the academic discipline and types of academic work

Total labor intensity of the discipline is 1 CU (36 AH)

Type of educational work	Labor intensity		Labor intensity (AH) in semesters
	volume in credit units (CU)	volume in academic hours (AH)	5 semester
Classroom work, including	<b>0,61</b>	<b>22</b>	<b>22</b>
Lectures (L)	0,17	6	6
Laboratory practicum (LP)*			
Practicals (P)	0,44	16	16
Seminars (S)			
Student's individual work (SIW)	<b>0,39</b>	<b>14</b>	<b>14</b>
Mid-term assessment	Included in the final class structure		
credit			
<b>TOTAL LABOR INTENSITY</b>	<b>1</b>	<b>36</b>	<b>36</b>

#### 5. Sections of the academic discipline and competencies that are formed

No	Competence code	Section name of the discipline
1.	<b>UC-1</b> (IUC-1.2, IUC-1.3), <b>PC-7</b> (IPC-7.1)	Introduction. Subject and scientific and practical tasks of pharmacogenetics.
2.	<b>UC-1</b> (IUC-1.2, IUC-1.3), <b>PC-7</b> (IPC-7.1)	Genetic factors affecting the pharmacokinetics of drugs
3.	<b>UC-1</b> (IUC-1.2, IUC-1.3), <b>PC-7</b> (IPC-7.1)	Genetic factors affecting the pharmacodynamics of drugs
	<b>UC-1</b> (IUC-1.2, IUC-1.3), <b>PC-7</b> (IPC-7.1)	Pharmacogenetics of psychotropic drugs
	<b>UC-1</b> (IUC-1.2, IUC-1.3), <b>PC-7</b> (IPC-7.1)	Pharmacogenetic bases of differentiated use of drugs that affect the functions of the digestive system, regulate metabolic processes, inhibit inflammation and affect immune processes
	<b>UC-1</b> (IUC-1.2, IUC-1.3), <b>PC-7</b> (IPC-7.1)	Pharmacogenetic bases of differentiated use of antimicrobial and antiparasitic drugs