

Summary of the working program of the academic discipline

« PHARMACEUTICAL ECOLOGY »

General Educational Program of higher education (specialist's degree programs)
33.05.01 Pharmacy

Department: Hygiene

1. The purpose of mastering the discipline:

the formation of students' modern ideas about relationships between the biosphere and society, understanding the cause-and-effect relationships between the quality of the environment and man's health, acquiring knowledge and skills of individual and population prevention of environment-born diseases, proposing the environmental protection in the professional activity, introducing the principles of rational nature management, mastering a number of universal competencies (UK-1, UK-8).

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

2.1. The discipline Pharmaceutical Ecology refers to the the part formed by the participants of educational relations), Block 1 of GEP HE (B1.UOO.4).

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

№	Competence code	The content of the competence (or its part)	Code and name of the competence acquisition metric	As a result of mastering the discipline, the students should:		
				know	be able to	possess
1.	UC-1	Able to realize critical analysis of problem situations based on a systematic approach, develop strategy actions	UC-1.1. Analyzes the problem situation as a system identifying its components and connections between them UC-1.2. Identifies gaps in the information needed to solve a problem situation, and designs processes for their elimination UC-1.3. Critically assesses reliability of information sources, works with conflicting information from different sources. UC-1.4. Develops and meaningfully argues the strategy of solving the problem	Basic concepts and laws of general ecology, legislation on environmental monitoring. Indicators of the environment and the population health; selection of priority pollutants, risk groups of the population, areas of high risk of disorders development in public health, depending on the environment.	Analyze indicators for assessing the quality of the environment and the population health; calculate and analyze indicators of carcinogenic and non-carcinogenic risk to public health; evaluate the reliability of the relationship between environmental quality and public health.	Methodology for collecting, processing and analyzing data on environmental factors and public health; methodology for assessing the carcinogenic and non-carcinogenic risk of environmental chemicals for public health. The skills of choosing and justifying optimal measures to minimize and eliminate health risks.

			situations based on the system and interdisciplinary approaches			
2.	UC-8	Able to create and support in everyday life and in professional activity, safe living conditions for the preservation of the natural environment, ensuring the sustainable development of society, including in case of threat and occurrence of emergency situations and military conflicts	UC-8.1. Analyzes the factors of harmful influence on the vital activity of the elements of the habitat (technical means, technological processes, materials, buildings and structures, natural and social phenomena) UC-8.2. Identifies dangerous and harmful factors within the framework of the activity UC-8.3. Solves problems related to safety violations and participates in prevention activities of emergencies in the workplace UC-8.4. Observes and explains rules of conduct in the event of emergencies of natural and man-made origin, provides first aid	Goals, objectives, legislative documents that determine the organization of environmental monitoring; environmental legislation. Indicators of the state of the environment and the health of the population; selection of priority pollutants, risk groups of the population, areas of high risk of developing health disorders; methods for establishing cause-and-effect relationships between the level of environmental factors and public health; main provisions of the methodology of risk analysis for human health.	Use legislative and regulatory documents to organize and ensure the work of medical, environmental and socio-hygienic monitoring; Develop, justify medical and preventive measures and make management decisions aimed at maintaining population health	Skills for organizing interaction and data exchange between participants in medical, environmental and socio-hygienic monitoring; The skills to perform the ranking of risk factors for public health, the choice and justification of optimal measures to minimize and eliminate health risks.

4. Volume of the academic discipline and types of academic work

Total labor intensity of the discipline is 2 CU (72AH)

Type of educational work	Labor intensity		Labor intensity (AH) in semesters
	volume in credit units (CU)	volume in academic hours (AH)	
Classroom work, including	1,22	44	44
Lectures (L)	0,28	10	10
Laboratory practicum (LP)*	-	-	-
Practicals (P)	0,94	34	34
Seminars (S)	-	-	-
Student's individual work (SIW)	0,78	28	28
Mid-term assessment			
credit/exam	credit		
TOTAL LABOR INTENSITY	2	72	72

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

№	Competence code	Section name of the discipline
1.	UC-1 UC-8	Fundamentals of ecology
2.	UC-1 UC-8	Medical ecology