

Federal State Budgetary Educational Institution of Higher Education
"Privolzhsky Research Medical University"
Ministry of Health of the Russian Federation

BANK OF ASSESSMENT TOOLS FOR DISCIPLINE

Toxicological chemistry

Training program (specialty): 33.05.01 PHARMACY

Department: Pharmaceutical Chemistry and Pharmacognosy

Mode of study: full-time

Nizhny Novgorod
2022

1. Bank of assessment tools for the current monitoring of academic performance, mid-term assessment of students in the discipline "Toxicological Chemistry"

This Bank of Assessment Tools (BAT) for the discipline " **Toxicological Chemistry** " is an integral appendix to the working program of the discipline " **Toxicological Chemistry** ". All the details of the approval submitted in the WPD for this discipline apply to this BAT.

2. List of assessment tools

The following assessment tools are used to determine the quality of mastering the academic material by students in the discipline "Toxicological Chemistry”:

No.	Assessment tool	Brief description of the assessment tool	Presentation of the assessment tool in the BAT
1	Test	A system of standardized tasks that allows you to automate the procedure of measuring the level of knowledge and skills of a student	Bank of test tasks
2	Colloquium	A tool of controlling the mastering of study materials of a topic, section or sections of a discipline, organized as a class in the form of an interview between a teacher and students.	Questions on topics/sections of the discipline
3	Interview	A tool of control organized as a special conversation between the teacher and the student on topics related to the discipline being studied, and designed to clarify the amount of knowledge of the student on a specific section, topic, problem, etc.	Questions on topics/sections of the discipline
4	Situational tasks	A method of control that allows you to assess the criticality of thinking and the degree of the material comprehension, the ability to apply theoretical knowledge in practice.	List of tasks

3. A list of competencies indicating the stages of their formation in the process of mastering the educational program and the types of evaluation tools

Code and formulation of competence*	Stage of competence formation	Controlled sections of the discipline	Assessment tools
-------------------------------------	-------------------------------	---------------------------------------	------------------

UC-1. the ability to carry out a critical analysis of problem situations based on a systematic approach, to develop an action strategy	Entry, Current, Mid-term	Section 1. Toxicological chemistry as a special discipline. Legal basis of chemical-toxicological analysis. Detoxification methods for acute poisoning Section 2. Biochemical toxicology Section 3-6. Analytical toxicology	Tests, control questions, situational tasks, individual survey
UC-2 ability to manage a project at all stages of its life cycle	Input, Current, Intermediate	Section 1. Toxicological chemistry as a special discipline. Legal basis of chemical-toxicological analysis. Detoxification methods for acute poisoning Section 2. Biochemical toxicology Section 3-6. Analytical toxicology	Tests, control questions, situational tasks, individual survey
GPC-1. The ability to use basic biological, physico-chemical, chemical, mathematical methods for the development, research and examination of medicines, the manufacture of medicines	Input, Current, Intermediate	Section 1. Toxicological chemistry as a special discipline. Legal basis of chemical-toxicological analysis. Detoxification methods for acute poisoning Section 2. Biochemical toxicology Section 3-6. Analytical toxicology	Tests, control questions, situational tasks, individual survey
GPC-3. The ability to carry out professional activities, taking into account specific economic, environmental, social factors within the framework of the system of legal regulation of the sphere of circulation of medicines	Input, Current, Intermediate	Section 1. Toxicological chemistry as a special discipline. Legal basis of chemical-toxicological analysis. Detoxification methods for acute poisoning Section 2. Biochemical toxicology Section 3-6. Analytical toxicology.	Tests, control questions, situational tasks, individual survey
GPC-6. Ability understand the principles of operation of modern information technologies and use them to solve the problems of professional activity	Input, Current, Intermediate	Section 1. Toxicological chemistry as a special discipline. Legal basis of chemical-toxicological analysis. Detoxification methods for acute poisoning Section 2. Biochemical toxicology Section 3-6. Analytical toxicology.	Tests, control questions, situational tasks, individual survey
PC-4. Participation in monitoring the quality, efficacy and safety of medicines and medicinal plant materials	Input, Current, Intermediate	Section 1. Toxicological chemistry as a special discipline. Legal basis of chemical-toxicological analysis. Detoxification methods for acute poisoning Section 2. Biochemical toxicology Section 3-6. Analytical toxicology.	Tests, control questions, situational tasks, individual survey
PC-7. Implementation of operations related to the technological process in the manufacture of medicines, and their control	Input, Current, Intermediate	Section 1. Toxicological chemistry as a special discipline. Legal basis of chemical-toxicological analysis. Detoxification methods for acute poisoning Section 2. Biochemical toxicology Section 3-6. Analytical toxicology	Tests, control questions, situational tasks, individual survey
PC-12. Ability take part in the conduct of chemical-toxicological and forensic-chemical research in order to diagnose poisoning, drug and alcohol intoxication	Input, Current, Intermediate	Section 1. Toxicological chemistry as a special discipline. Legal basis of chemical-toxicological analysis. Detoxification methods for acute poisoning Section 2. Biochemical toxicology Section 3-6. Analytical toxicology	Tests, control questions, situational tasks, individual survey

4. The content of the assessment tools of entry, current control

Input / current control is carried out by the teacher of the discipline when conducting classes in the form: tests, control questions, situational tasks, individual survey, essay.

4.1. Tasks for assessing the competencies of UC-1, UC-2, GPC-1, GPC-3, GPC-6, PC-4,7,12 are presented on the PIMU Educational Portal:

<https://sdo.pimunn.net/course/view.php?id=1799>

4.2. Questions for colloquia, interviews (UC-1, UC-2, GPC -1, GPC -3, GPC -6, PC-4,7,12) presented on the PIMU Educational Portal:

<https://sdo.pimunn.net/course/view.php?id=1799>

4.3. Tasks (assessment tools) submitted for the exam (UC-1, UC-2, GPC -1, GPC -3, GPC -6, PC-4,7,12) are presented on the PIMU Educational Portal:

<https://sdo.pimunn.net/course/view.php?id=1799>

5. The content of the assessment tools of mid-term assessment

Mid-term assessment is carried out in the form of exam.

The fund of assessment tools for conducting ongoing monitoring and intermediate certification of students in this discipline is presented on the PIMU Educational Portal:

<https://sdo.pimunn.net/course/view.php?id=1799>

5.1 The list of control tasks and other materials necessary for the assessment of knowledge, skills and work experience

5.1.1. Questions for the discipline exam Toxicological chemistry

Question	Competence code (according to the WPD)
1	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12
2	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12
3	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12
4	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12
5	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12
6	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12
7	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12
8	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12
9	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12
10	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12
11	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12
12	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12
13	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12
14	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12
15	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12
16	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12
17	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12
18	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12
19	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12
20	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12
21	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12
22	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12
23	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12
24	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12
25	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12
26	UC-1, UC-2, GPC-1, GPC -3, GPC -6, PC-4,7,12

6. Criteria for evaluating learning outcomes

Learning outcomes	Assessment of competence developed			
	unsatisfactory	satisfactory	good	excellent
Completeness of knowledge	The level of knowledge is below the minimum requirements. There were bad mistakes	The minimum acceptable level of knowledge. A lot of light mistakes were made	The level of knowledge in the volume corresponding to the training program. A few light mistakes were made	The level of knowledge in the volume corresponding to the training program, without errors
Availability of skills	Basic skills are not demonstrated when solving standard tasks. There were bad mistakes	Basic skills are demonstrated. Typical problems with light mistakes have been solved. All tasks have been completed, but not in full.	All basic skills are demonstrated. All the main tasks have been solved with light mistakes. All tasks have been completed, in full, but some of them with shortcomings	All the basic skills were demonstrated, all the main tasks were solved with some minor shortcomings, all the tasks were completed in full
Availability of skills (possession of experience)	Basic skills are not demonstrated when solving standard tasks. There were bad mistakes	There is a minimal set of skills for solving standard tasks with some shortcomings	Basic skills in solving standard tasks with some shortcomings are demonstrated	Skills in solving non-standard tasks without mistakes and shortcomings are demonstrated
Characteristics of competence formation*	The competence is not fully formed. The available knowledge and skills are not enough to solve professional tasks. Repeated training is required	The formation of competence meets the minimum requirements. The available knowledge and abilities are generally sufficient to solve professional tasks, but additional practice is required for most practical tasks	The formation of competence generally meets the requirements, but there are shortcomings. The available knowledge, skills and motivation are generally sufficient to solve professional tasks, but additional practice is required for some professional tasks	The formation of competence fully meets the requirements. The available knowledge, skills and motivation are fully sufficient to solve complex professional tasks

Learning outcomes	Assessment of competence developed			
	unsatisfactory	satisfactory	good	excellent
The level of competence formation*	Low	Below average	Intermediate	High

For testing:

Mark "5" (Excellent) - points (100-90%)

Mark "4" (Good) - points (89-80%)

Mark "3" (Satisfactory) - points (79-70%)

Less than 70% – Unsatisfactory – Mark "2"

Developer(s):
Pantelev D.A., Associate Professor of the Department of Pharmaceutical Chemistry and
Pharmacognosy, Ph.D.

Date December 14, 2022