

**Attestation procedure  
in the discipline "Pharmacognosy"  
for students of the educational program of 2022 admission year  
specialist in the specialty 33.05.01 Pharmacy,  
direction (profile) Pharmacy,  
form of study full-time  
for the 2024-2025 academic year**

Attestation of students in the discipline "Pharmacognosy" is carried out in the form of examination (7th semester) in 2 stages.

The first stage of the examination is conducted in the form of testing in the scope of the discipline programme and practical skills at the final class in the 7th semester. The final test is held on a separate day before the exam at the final class using test tasks of the test bank posted on the portal. A student receives 1 of 10 variants of test tasks formed by random selection from the test bank. Test questions include theoretical material on general characteristics, classification, methods of analysis, pharmacological properties of groups of biologically active substances (BAS) and their plant sources. In addition, the tests include questions on the diagnosis of medicinal plant raw materials (LRS) by description of external and microscopic features, as well as its standardisation in accordance with the requirements of current regulatory documentation. Passing of practical skills is also held at the final lesson in the 7th semester and involves the identification of medicinal plants and medicinal plant raw materials on the proposed herbarium specimens and samples of whole or crushed plant raw materials. In the ticket it is supposed to identify 2 herbarium specimens and 3 samples of medicinal plant raw materials.

The second stage of interim certification in the discipline "Pharmacognosy" includes an interview on theoretical issues of pharmacognosy and a special part of the subject, including the characteristics of medicinal plant raw materials by groups of BAS.

Assessment of theoretical knowledge of students is carried out on tickets. Questions include material on raw material base and standardisation of FRS, classification, physical and chemical properties of BAS, methods of their isolation from FRS, qualitative detection and quantitative analysis, methods of collection, drying and storage of FRS, impurities to FRS, chemical composition, pharmacological properties, use in medical practice and preparations of FRS.

Students are familiarised in advance with the form of the examination; for preparation they are given a list of questions on these sections.

The final discipline rating ( $R_d$ ) is calculated according to the following formula:

$$R_d = (R_{prev} + R_{spec\_theor} + R_{spec\_pn} + R_{pa}) / n$$

where  $R_d$  - rating for the discipline

$R_{pa}$  - rating of intermediate certification (exam)

$R_{prev}$  - average rating of the discipline for the fifth, sixth and seventh semesters - individual assessment of mastering the academic discipline in points for three semesters of study.

$R_{spec\_theor}$  - rating on the final test;

$R_{\text{spec\_pn}}$  - rating on practical skills.

The preliminary rating of the discipline for 3 semesters of study is calculated according to the following formula:

$$R_{\text{prev}} = (R_{\text{sem5}} + R_{\text{sem6}} + R_{\text{sem7}}) / 3$$

where:

$R_{\text{sem5}}$  - rating for the discipline in 5 semester preliminary

$R_{\text{sem6}}$  - rating for the discipline in 6 semester preliminary

$R_{\text{sem7}}$  - rating for the discipline in 7 semester preliminary

Rating for the discipline in the 5th, 6th and 7th semester is calculated according to the following formula:

$$R_{\text{sem}} = (R_{\text{tek}} + R_{\text{ind}}) / 2 + R_{\text{b}} - R_{\text{p}},$$

where:

$R_{\text{tek}}$  - current rating for the fifth, sixth and seventh semester;

$R_{\text{ind}}$  - rating for independent work

$R_{\text{b}}$  - rating of bonuses

$R_{\text{p}}$  - rating of penalties

The maximum number of points that a student can receive in the discipline in a semester is 100. The minimum number of points at which the discipline should be credited - 61.

#### 1. Methodology for calculating the average score of current academic performance

Rating score for the discipline ( $R_{\text{tek}}$ ) is evaluated summarily taking into account the current academic performance, the evaluation of which is carried out by the average score, taking into account the assessment for independent work.

Knowledge and work of the student in practical classes are evaluated by the teacher in each semester on the classical 5-point system.

Independent work of students in the 5th and 6th semesters includes independent study of individual topics provided by the working programme. The form of students' reporting is an outline. Each topic of independent work is assessed with "credit", the work assessed with "no credit" is not counted and requires revision by the student (Table 1).

Independent work of students in semester 7 includes independent study of individual topics provided by the working programme. The form of student reporting is the fulfilment of tasks on the topic. For each topic of independent work the student receives a grade in the 100-point system.

At the end of each semester, a centralised calculation of the average grade of the student's performance in the semester with its conversion into the 100-point system is made (Table 2).

Table 1. Calculation of points for independent work of students

Assessment criteria	Rating score
The work is not submitted, it is not submitted in full, the work does not	uncredited

correspond to the topic of the independent work.	
The work is submitted in full, but it contains more than 2 gross thematic errors or misses more than 1 key issue of the topic of independent work.	uncredited
The work is submitted in full, but there are 1 - 2 gross thematic errors or 1 key issue of the independent work topic is missing.	credited
The work is submitted in full, there are no gross thematic errors in it, and the key questions of the independent work topic are not missed.	credited

Table 2. Conversion of the student's current grade point average into a rating score according to the 100-point system

Average score according to the 5-point system	Score on a 100-point system	Average score according to the 5-point system	Score on a 100-point system	Average score according to the 5-point system	Score on a 100-point system	Average score according to the 5-point system	Score on a 100-point system
5,00	100	3,45	70	2,48	40	2,09	10
4,95	99	3,40	69	2,46	39	2,08	9
4,90	98	3,35	68	2,44	38	2,07	8
4,85	97	3,30	67	2,42	37	2,06	7
4,80	96	3,25	66	2,40	36	2,05	6
4,75	95	3,20	65	2,38	35	2,04	5
4,70	94	3,15	64	2,36	34	2,03	4
4,65	93	3,10	63	2,34	33	2,02	3
4,60	92	3,05	62	2,32	32	2,01	2
4,5	91	3,00	61	2,30	31	2,00	1
4,47	90	2,98	60	2,29	30		
4,43	89	2,95	59	2,28	29		
4,40	88	2,93	58	2,27	28		
4,37	87	2,90	57	2,26	27		
4,33	86	2,88	56	2,25	26		
4,30	85	2,85	55	2,24	25		
4,27	84	2,83	54	2,23	24		
4,23	83	2,80	53	2,22	23		
4,20	82	2,78	52	2,21	22		
4,17	81	2,75	51	2,20	21		
4,13	80	2,73	50	2,19	20		
4,10	79	2,70	49	2,18	19		
4,07	78	2,68	48	2,17	18		
4,03	77	2,65	47	2,16	17		
4,00	76	2,63	46	2,15	16		
3,90	75	2,60	45	2,14	15		
3,80	74	2,58	44	2,13	14		

3,70	73	2,55	43	2,12	13
3,60	72	2,53	42	2,11	12
3,50	71	2,50	41	2,10	11

## 2. Methodology of scoring for testing in the semester

The minimum number of points that can be obtained during the test is 61, the maximum - 100 points.

The test taker receives 1 (one) point for a correctly completed task, and 0 (zero) points for an incorrectly completed task. Evaluation of results after the test is carried out in accordance with Table 3.

The test is considered to be completed when 61 points and higher are obtained. If the score is less than 61 points - it is necessary to pass the test again.

Table 3: Conversion of the test result into a rating score to the 100-point system

Number of errors made in answering 100 test tasks	% of test task completion	Rating score according to the 100-point system
0 - 9	91-100	91-100
10 - 19	81-90	81-90
20 - 29	71-80	71-80
30 - 39	61-70	61-70
$\geq 40$	0-60	0

Table 4. Criteria for assessing the level of mastery of the discipline material and competencies formed

Response Characterization	Assessment ECTS	Points	Level of competence in the discipline
A full, detailed answer to the question, a set of conscious knowledge about the object is shown, manifested in the free operation of concepts, the ability to identify its essential and non-essential features, cause-and-effect relationships. Knowledge about the object is demonstrated against the background of understanding it in the system of the given science and interdisciplinary relations. The answer is formulated in terms of science, presented in literary language, logical, evidentiary, demonstrates the author's position of the student. The student demonstrates an advanced high level of competence.	A	100-96	HIGH
A full, detailed answer to the question, a set of conscious knowledge about the object is shown, the main provisions of the topic are evidently disclosed; the answer has a clear structure, logical sequence, reflecting the essence of the concepts, theories, phenomena disclosed. Knowledge of the object is demonstrated against the background of understanding it in the system of this science and interdisciplinary relations. The answer is presented in literary language in terms of science. There may be flaws in the definition of concepts, corrected by the student independently in the process of answering. The student demonstrates an advanced level of competence.	B	95-91	

A full, detailed answer to the question, the ability to identify essential and non-essential features, cause-and-effect relationships is shown. The answer is clearly structured, logical, written in literary language in terms of science. There may be flaws or minor errors, corrected by the student with the help of the teacher. The student demonstrates a sufficient level of competence.	C	90-81	MEDIUM
A full, detailed answer to the question, the ability to identify essential and non-essential features, cause-and-effect relationships is shown. The answer is clearly structured, logical, stated in terms of science. However, there are minor errors or mistakes, corrected by the student with the help of "leading" questions of the teacher. The student demonstrates an average level of competence.	D	80-76	
The answer to the question is complete but not consistent enough, but it shows the ability to identify essential and non-essential features and cause-and-effect relationships. The answer is logical and stated in terms of science. There may be 1-2 errors in the definition of basic concepts, which the student finds it difficult to correct independently. The student demonstrates a low level of competence.	E	75-71	LOW
The answer is insufficiently complete and insufficiently detailed. The logic and sequence of presentation have violations. There are errors in the disclosure of concepts, use of terms. The student is not able to independently identify essential and nonessential features and cause-and-effect relationships. The learner can concretize generalized knowledge, proving by examples their main provisions only with the help of the teacher. Speech design requires corrections, adjustments. The student demonstrates the threshold level of competence formation.	E	70-66	
The answer is incomplete, the logic and sequence of presentation have significant violations. There are gross errors in determining the essence of the disclosed concepts, theories, phenomena, due to the student's lack of understanding of their essential and nonessential features and relationships. There are no conclusions in the answer. The ability to reveal specific manifestations of generalized knowledge is not shown. Speech design requires corrections, corrections. The student demonstrates an extremely low level of competence formation.	E	65-61	EXTREMELY LOW
The answer is incomplete, representing scattered knowledge on the topic of the question with significant errors in definitions. There is fragmentation, illogicality of presentation. The student does not realize the connection of this concept, theory, phenomenon with other objects of the discipline. There are no conclusions, concretization and evidence of presentation. Speech is illiterate. Additional and clarifying questions of the teacher do not lead to correction of the student's answer not only to the question posed, but also to other questions of the discipline. The student demonstrates an insufficient level of competence.	Fx	60-41	COMPETENCY OUTSIDE
No answers are received on the basic questions of the discipline. The student does not demonstrate indicators of achievement of the formation of competencies. The competence is absent.	F	40-0	

#### 4. System of bonuses (Rb) and penalties (Rsh)

In this order of evaluation of the final rating score for the discipline provides bonuses that increase the rating score and penalties that reduce the rating, according to the table below (see Table 4).

Table 5: Bonuses and penalties by discipline

<u>Types of bonuses</u>	<u>Bonuses</u>	<u>oints</u>
<u>УИРС</u>	<u>Подготовка реферативного</u>	<u>0,5-2,0</u>

	<u>доклада с использованием научной литературы на иностранном языке</u>	
	<u>Участие в МНО на кафедре (по итогам работы)</u>	<u>3,0</u>
	<u>Подготовка наглядных пособий для кафедры</u>	<u>1,0</u>
<u>НИРС</u>	<u>Подготовка и выступление с докладом на конференциях</u>	<u>0,5-1,5</u>
	<u>публикации в печати (Если в соавторстве, то баллы делятся на число авторов)</u>	
	<u>тезисы доклада на научной конференции</u>	<u>1,0</u>
	<u>статья в сборнике трудов научной конференции местного уровня</u>	<u>1,0</u>
	<u>регионального уровня</u>	<u>1,0</u>
	<u>всероссийского уровня</u>	<u>2,0</u>
	<u>международного уровня</u>	<u>3,0</u>
	<u>статьи в журналах перечня ВАК</u>	
	<u>журналах, индексируемых в базе данных Scopus</u>	<u>4,0</u>
		<u>5,0</u>
<u>Types of fines</u>	<u>Fines</u>	<u>Points</u>
<u>Дисциплинарные</u>	<u>Пропуск без уважительной причины лекции или практического занятия</u>	<u>- 2,0</u>
	<u>Невыполнение задания на занятиях по практике</u>	<u>- 2,0</u>
	<u>Систематические опоздания на лекции или практические занятия</u>	<u>- 1,0</u>
	<u>Выполнение самостоятельной работы не в установленные сроки</u>	<u>- 1,0</u>
	<u>Нарушение техники безопасности</u>	<u>- 2,0</u>
<u>Причинение материального ущерба</u>	<u>Порча оборудования и имущества</u>	<u>- 2,0</u>

The final grade that the teacher puts in the credit book is the rating of the discipline final (Rd), translated into a 5-point system (Table 5).

Table 6: Final assessment of the discipline

Score on a 100-point system	Assessment on a pass-credit - uncredited (for credit)	Assessment according to the 5-point system (for credit with a grade, examination)		Оценка по ECTS
100-96	Credit	5	Excellent	A
95-91				B
90-81		4	Good	C
80-76				D
75-71		3	Satisfactory	E
70-66				
65-61				
60-41	Uncredited	2	Unsatisfactory	Fx
40-0				F

Considered at the meeting of the department of pharmaceutical, toxicological chemistry, pharmacognosy and botany "28" August 2024, protocol No 1

Head of the Department



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