

**Certification procedure
on the discipline 'Pharmacology'
for students of 2023,2024 year of admission
on the educational program of a specialty
on specialty 05/31/03 Dentistry,
specialty (profile) Dentistry,
full-time education form
for the 2025-2026 academic year**

Developed on the basis of the “Regulations on the forms, frequency, procedure for conducting ongoing monitoring of academic performance and midterm assessment, as well as the point-rating system for assessing the academic performance of students of the Federal State Budgetary Educational Institution of Higher Education Volgograd State Medical University of the Ministry of Health of the Russian Federation” (Order No. 1034-KO dated July 19, 2024).

Basic concepts and terms of the BRS:

Rcurrent– current rating for the discipline;

Rindep– rating of the student’s independent work within the framework of the discipline;

Rsem– semester rating for the discipline;

Rb– bonus rating;

Rp– rating of penalty;

Rpre– preliminary rating for the discipline for all semesters of study;

Ria– rating of the intermediate assessment for the discipline (exam);

Rd– final rating for the discipline – individual assessment studying the discipline taking into account the midterm assessment;

Calculation of rating components by discipline (Rd)

The minimum number of points on a 100-point scale for a particular component of the rating to be considered passed is 61 points, the maximum is 100 points.

*Methodology for assessing and calculating the current rating in the semester(**Rcurrent**)*

The current semester rating is calculated as the arithmetic mean of the grades received in theory for the final classes and the arithmetic mean of the grades in theory for all practical classes in the semester

$$\mathbf{R_{current} = \Sigma nR_{current_theory} / n}$$

where $\Sigma nR_{current_theory}$ is the sum of current assessments for the theory, n– the number of current marks for theory

The student's performance in the ongoing monitoring of academic performance is assessed by the teacher during a seminar-type lesson using the classic 5-point scale, where:

2 – unsatisfactory;

3 – satisfactory;

4 – good;

5 – excellent.

Criteria for the forms of current certification used

Task type	Criteria and assessments	Rating on a 5-point scale			
		5	4	3	2
Test	• Percentage of correct answers	91-100	76-90	61-75	< 61
Solving situational problems	• The correctness of the answer received	loyal	loyal	partially true	incorrect
	• The presence, completeness and correctness of the justification for the response received	substantiated without comments	substantiated with comments	partially justified	there is no justification
Test	• The accuracy of the answers received	loyal	loyal	partially loyal	incorrect
	• Availability, completeness and correctness of the justification for the answers received	substantiated without comments	substantiated with comments	partially justified	-
Interview on control questions	• Correctness of the answer	loyal	loyal	partially true	incorrect
	• Completeness of the answer	full	quite complete	incomplete	incomplete
	• Structure and logic of the answer	structured, logical	mostly structured, logical	poorly structured, logic is broken	unstructured, fragmented, chaotic
Assessment of the acquisition of practical skills (abilities)	• Knowledge of the theoretical foundations of skill performance	knowledge	knowledge	uncertain knowledge	lack of knowledge
	• Compliance with the technique of performing the skill and the success of the result	compliance, successful outcome	compliance with minor inaccuracies, successful outcome	performing a skill only after correction by the teacher, successful result	an attempt to perform a skill that does not lead to a successful result, a refusal to perform a skill
	• Confidence and stability in skill performance	confidence and stability	lack of confidence in the face of overall stability	lack of confidence, repetition of errors when reproducing a skill	

If a student receives an unsatisfactory grade for the final lesson on theory and/or formulation or misses it, he/she must retake the lesson and receive a grade of “satisfactory” or higher at the departmental practice according to the practice schedule.

At the end of each semester of studying a discipline, R_{tech} is calculated and the calculated value is converted into a 100-point scale.

The absence of current debt is considered to be the value of R_{tech} more than 61 points, as well as the absence of unprocessed absences (with the exception of cases stipulated by local regulations of the university), the presence of grades of “satisfactory” or higher for final classes, as well as passing the final test in the 6th semester with a grade of “pass”

*Methodology for assessing and calculating the rating of a student's independent work in a semester***(R_{indep})**

The student's SRO rating for a semester is calculated as the arithmetic mean of all grades received for completing the SRO. SRO includes independent study of individual topics or parts of them (for example, preparing prescriptions and annotations for medications) within the total number of hours stipulated by the curriculum.

$$R_{current} = \Sigma n R_{indep} / n$$

$\Sigma n R_{indep}$ – sum of current grades for independent work, n – number of current ratings for independent work.

The Independent Work assessment is carried out on a classic 5-point scale,

Where:

2 – unsatisfactory;

3 – satisfactory;

4 – good;

5 – excellent.

Criteria for the general assessment of Independent Work s

Task type	Criteria and assessments	Rating on a 5-point scale			
		5	4	3	2
Independent Work in the form of an electronic course/course element at the Volgograd State Medical University	• Compliance With dates of work completion	observed	observed	observed	not observed
	• Completeness of study of the material	studied fully	studied fully	studied fully	not fully studied
	• Completion of current test tasks (% of correct answers in each test)	91-100	76-90	61-75	< 61
	• Completing the final assessment section	91-100	76-90	61-75	< 61

At the end of each semester of studying a discipline, the student's R is calculated and the calculated value is converted into a 100-point scale.

The absence of current debt is considered to be an R_{indep} value of more than 61 points, provided that assignments on all topics provided for in the curriculum are completed.

*Methodology for calculating the semester rating for a discipline***(R_{sem})**

The semester rating is calculated as the arithmetic mean of the current rating and the independent work rating, taking into account bonuses that increase the rating score and penalties that decrease it.

$$R_{sem} = (R_{current} + R_{indep}) / 2 + R_b - R_p$$

Where:

R_{current} -current ranking for the fifth or sixth semester

R_{indep}– rating of the student’s independent work within the framework of the discipline for the fifth or sixth semester;

R_b – bonus rating

R_p – rating of penalties

The criteria for bonuses and penalties are given in Table 2.

The criteria for bonuses and penalties are given in the table.

Bonuses	Name	Points
ERW	Educational research work on the topics of the subject being studied	up to + 3.0
Research and development work	Certificate, diploma, etc. of a participant in the International Scientific Education Department	up to + 5.0
Penalties	Name	Points
Disciplinary	Absence from a lecture or practical lesson without a valid reason	- 2.0
	Failure to complete assignments during practical classes	- 2.0
	Systematic lateness to lectures or practical classes	- 1.0
	Completing independent work outside the established deadlines	- 1.0
	Violation of safety regulations	- 2.0
Causing material damage	Damage to equipment and property	- 2.0

Bonuses and penalties are awarded on a 100-point scale.

Methodology for calculating the preliminary rating for a discipline (R_{pre}).

The preliminary rating is calculated as the arithmetic mean of the semester ratings for all semesters of study of the discipline, subject to the completion of the final test with a grade of “pass”:

$$R_{pre} = (R_{sem4} + R_{sem5}) / 2,$$

where R_{sem4.5} is the semester rating for the discipline for semester 4 or 5

Methodology for calculating the midterm assessment rating(R_{ia})

The midterm assessment for the discipline is carried out in the form of an exam and consists of two stages and is taken on the exam days established by the academic department.

Stage I.

The format of the test is practical skills in writing prescriptions. Each test ticket contains five medications for which a prescription must be written, taking into account all the rules for prescribing various dosage forms and filling out the prescription form. Results from the first stage of the test are graded "pass/fail."

Evaluation criteria:

"Passed"- the student wrote out all the prescriptions correctly, taking into account all the listed requirements, or made mistakes in one or two prescriptions.

"Not accepted"- the student wrote out three to five prescriptions incorrectly.

A student who receives a "Pass" grade is admitted to the second stage of the midterm assessment. A student who receives a "Fail" grade is not admitted to the second stage of the midterm assessment and receives a final exam score of less than 61 points (bonuses and penalties are not included) with the opportunity to retake the exam in accordance with the established procedure.

Stage II.

The final interview is conducted using examination tickets, immediately after stage I, and includes 3 theoretical questions.

The exam is conducted in the form of an interview with an assessment of the development of the practical component of the developed competencies, including questions on all studied sections of the program. The minimum number of points (Rpa) that must be obtained in the interview to pass the exam is 61, the maximum is 100 points (Table 3).

Table 3 –Criteria for assessing the level of assimilation of the discipline material and the development of competencies

Response characteristics	Grade ECTS	Points in BRS	Level of development of competence in the discipline
A complete, detailed answer to the question is provided, demonstrating a comprehensive understanding of the subject, manifested in the fluent use of concepts, the ability to identify its essential and non-essential features, and cause-and-effect relationships. Knowledge of the subject is demonstrated against the backdrop of its understanding within the framework of the given science and its interdisciplinary connections. The answer is formulated in scientific terms, presented in literary language, is logical, evidence-based, and demonstrates the student's original position. The student demonstrates a high, advanced level of competence. The midterm assessment has been passed.	A	100-96	HIGH
A complete, detailed answer to the question posed is provided, demonstrating the student's conscious knowledge of the subject, and convincingly explaining the main concepts of the topic. The answer displays a clear structure and logical sequence, reflecting the essence of the concepts, theories, and phenomena being explored. Knowledge of the subject is demonstrated against the backdrop of its understanding within the framework of the given science and its interdisciplinary connections. The answer is presented in literary language, using scientific terminology. Deficiencies in definitions of concepts may be present, but the student corrects them independently during the answer process. The student demonstrates a high level of competence development. Midterm assessment has been passed.	IN	95-91	

A complete, detailed answer to the question was provided, demonstrating the ability to identify essential and nonessential features and cause-and-effect relationships. The answer is clearly structured, logical, and presented in literary language using scientific terminology. There may be some shortcomings or minor errors, which the student corrected with the teacher's assistance. The student demonstrates an average, advanced level of competence. The midterm assessment has been passed.	WITH	90-81	AVERAGE
A complete, detailed answer to the question was provided, demonstrating the ability to identify essential and nonessential characteristics and cause-and-effect relationships. The answer is clearly structured, logical, and presented in scientific terms. However, minor errors or omissions were made, which the student corrected with the help of the instructor's probing questions. The student demonstrates an average, sufficient level of competency development. The midterm assessment has been passed.	D	80-76	
The answer to the question was complete but not entirely consistent, demonstrating the ability to identify essential and nonessential characteristics and cause-and-effect relationships. The answer is logical and presented in scientific terms. One or two errors in defining key concepts may be present, which the student has difficulty correcting independently. The student demonstrates a low level of competence development. The midterm assessment has been passed.	E	75-71	SHORT
The answer provided is insufficiently comprehensive and incomplete. The logic and sequence of presentation are flawed. Errors were made in the definition of concepts and the use of terms. The student is unable to independently identify essential and nonessential features and cause-and-effect relationships. The student can only concretize generalized knowledge, demonstrating its main points with examples, with the help of the teacher. The student's speech requires correction and adjustment. The student demonstrates an extremely low level of competence development. The midterm assessment has been passed.	E	70-66	
The answer provided is incomplete, with significant flaws in the logic and sequence of presentation. Significant errors were made in defining the essence of the concepts, theories, and phenomena being discussed, due to the student's lack of understanding of their essential and nonessential characteristics and relationships. The answer lacks conclusions. The ability to identify specific manifestations of generalized knowledge is not demonstrated. The student's verbal presentation requires correction and adjustment. The student demonstrates a threshold level of competency development. The midterm assessment has been passed.	E	65-61	THRESHOLD
The answer provided is incomplete, representing fragmented knowledge on the topic of the question with significant definitional errors. The presentation is fragmentary and illogical. The student does not understand the connection between this concept, theory, or phenomenon and other subjects covered in the course. Conclusions, specificity, and evidence are lacking. Speech is illiterate. Additional and clarifying questions from the teacher do not lead to a correction of the student's answer, not only to the question posed but also to other questions in the course. Competence is absent. The midterm assessment has not been passed.	Fx	60-41	COMPETENCE ABSENT
No answers were received to the course's core questions. The student does not demonstrate indicators of competency development. Competency is absent. Midterm assessment failed.	F	40-0	

The assessment tools and the procedure for conducting interim assessment are established in the fund of assessment tools for the discipline.

Final grade for the course(Rd)

The final grade for the discipline (Rd) is determined as the arithmetic mean of Rпрев, Rиа,

$$Rd = (Rpre + Ria) / 2,$$

where: Rd – final rating for the discipline

Rpre- preliminary rating for the discipline for all semesters of study

Ria- the rating of the intermediate assessment for the discipline (exam)

It is calculated on a 100-point system and then converted into a 5-point system according to Table 4.

Table 4 – Scale for converting a 100-point system into a 5-point system

Average score on a 5-point scale	Score on a 100-point scale	Average score on a 5-point scale	Score on a 100-point scale	Average score on a 5-point scale	Score on a 100-point scale	Average score on a 5-point scale	Score on a 100-point scale
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		

Table 5 - Final grade for the course

Rating on a 100-point scale	Rating on a 5-point scale (for credit and grade, exam)		ECTS assessment
100-96	5	Excellent	A
95-91			IN
90-81	4	Good	WITH
80-76			D
75-71	3	Satisfactory	E
70-66			
65-61			
60-41	2	Unsatisfactory	Fx
40-0			F

If a student receives an unsatisfactory grade on the exam (less than 61 points), the preliminary rating is taken to be equal to the grade for the exam in the 100-point system, where $R_d = R_{ia} = R_{pre}$.

When retaking the exam, a grade is given from 61 to 75 points, and the preliminary rating is also taken as equal to the grade for the exam: $R_d = R_{ia} = R_{pre}$.

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