

**Procedure for conducting attestation
in discipline «Clinical Biochemistry»
for students of 2024 year of admission
under the educational programme
31.05.01 General Medicine,
profile General Medicine,
(Specialist's degree),
form of study full-time
for the 2025-2026 academic year**

1. General principles for calculating the rating in the discipline

The rating for a discipline is an individual assessment of the student's study of the discipline, which consists of the rating for the entire period of study of the discipline (preliminary rating) and the rating of the intermediate attestation.

2. Calculation of preliminary rating components

2.1. General principles

The discipline is studied during one semester (the third), so the preliminary rating for the entire period of study (Rprelim) corresponds to the semester rating of the discipline in the third semester (Rsem):

$$R_{\text{prelim}} = R_{\text{sem}}$$

The semester rating of the discipline is calculated using the formula:

$$R_{\text{sem}} = (R_{\text{current}} + R_{\text{independent}}) / 2 + R_{\text{bonus}} - R_{\text{penalty}}$$

where R_{current} – current rating in the discipline,

$R_{\text{independent}}$ – rating of the student's independent work within the discipline,

R_{bonus} – bonus rating,

R_{penalty} – penalty rating.

2.2. Calculating the current rating in the semester

The current semester rating (R_{current}) is calculated as the arithmetic mean of all grades received by the student during the semester while completing current academic performance assessment tasks, which include the following types of assignments: testing, solving situational tasks, control work, interview on control questions, assessment of practical skills (abilities) mastery.

The completion of tasks is assessed by the teacher at each seminar-type lesson based on the criteria below (Table 1) using the classic 5-point scale, where:

2 – unsatisfactory;

3 – satisfactory;

4 – good;

5 – excellent.

Table 1

Criteria for the forms of current assessment used

Task type	Assessment criteria	Assessment on a 5-point scale			
		5	4	3	2
Testing	• Percentage of correct answers	91-100	76-90	61-75	< 61

Case-based problem solving	• Correctness of the answer obtained	correct	correct	partially correct	incorrect
	• Presence, completeness, and correctness of the justification for the answer obtained	justified without remarks	justified with remarks	partially justified	justification is absent
Control Test	• Correctness of the answer obtained	correct	correct	partially correct	incorrect
	• Presence, completeness, and correctness of the rationale for the answers obtained	justified without remarks	justified with remarks	partially justified	-
Oral examination on key topics	• Correctness of the answer	correct	correct	partially correct	incorrect
	• Completeness of the answer	complete	sufficiently complete	incomplete	incomplete
	• Structure and logic of the answer	structured, logical	mostly structured, logical	poorly structured, logic is compromised	unstructured, fragmented, chaotic
Practical competencies assessment	• Knowledge of the theoretical foundations of the skill performance	knowledge	knowledge	unsolid knowledge	lack of knowledge
	• Adherence to the technique of performing the skill and success of the outcome	compliance, successful outcome	compliance with minor inaccuracies, successful outcome	skill performance only after instructor's correction, successful outcome	attempt to perform the skill that does not lead to a successful outcome, refusal to perform the skill
	• Confidence and consistency in skill performance	confidence and stability	lack of confidence despite overall stability	uncertainty, repetition of errors during skill re-performance	

At the end of the semester, R_{current} is calculated and converted to a 100-point scale according to Table 3.

A value of R_{current} above 61 points is considered absence of current academic debt.

2.3. Calculation of the rating of independent work of a student in a semester (R_{cpo})

The independent work rating R_{cpo} for the semester is calculated as the arithmetic mean of all grades received by the student for completing independent work tasks.

Independent work includes self-study of specific topics within the total number of hours provided by the curriculum.

Assessment of independent work is conducted based on the criteria below (Table 2) using the classic 5-point scale, where:

- 2 – unsatisfactory;
- 3 – satisfactory;
- 4 – good;

5 – excellent.

Table 2

Criteria for assessing independent work

Task type	Assessment criteria	Assessment on a 5-point scale			
		5	4	3	2
Independent work in the form of an electronic course/course element on the EIOS of VolgSMU	• Adherence to deadlines	met	met	met	not met
	• Completeness of material coverage	fully covered	fully covered	fully covered	not fully covered
	• Completion of current test tasks (% of correct answers in each test)	91-100	76-90	61-75	< 61
	• Completion of the final assessment section	91-100	76-90	61-75	< 61

Upon completion of each study unit, the student's Rcpo is calculated and converted to a 100-point scale according to Table 3.

A value of Rcpo above 61 points is considered absence of current academic debt.

2.4. Conversion of the current rating and the independent student's work rating into a score on a 100-point system

At the end of the semester, the student's current rating and independent work rating, calculated on a 5-point scale, are converted to a 100-point scale. The conversion is carried out according to Table 3.

Table 3

Conversion to a rating 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	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		

2.5. Bonus and Penalty Rating

Bonuses and penalties are assigned on a 100-point scale. The criteria for bonuses and penalties are provided in Table 4.

Table 4

Bonuses and penalties for the discipline		
Bonuses	Title	Points
SERW	Educational research work on topics of the studied subject	до + 5,0
SRW	Certificate, diploma, award, etc. for participation in the department's SRS	до + 5,0
Penalties	Title	Points
Disciplinary	Unexcused absence from a lecture or practical class	- 2,0
	Failure to complete a task during practical classes	- 2,0
	Systematic tardiness to lectures or practical classes	- 1,0
	Violation of safety protocols	- 2,0
Causing material damage	Damage to equipment and property	- 2,0

3. Calculation of the intermediate attestation rating

Intermediate certification in the discipline is conducted in the form of a pass/fail exam and includes the following types of tasks: testing, assessment of practical skills (abilities) mastery.

Assessment of the level of formation of the required competencies in the student is carried out on a 100-point scale according to the criteria in Table 5.

Table 5

Criteria for assessing the level of mastery of the discipline material and competence formation

Answer characteristics	ECTS grade	Points in the BRS	Level of competence formation in the discipline
A complete and detailed answer to the question is provided, demonstrating a set of conscious knowledge about the subject, manifested in the free use of concepts, the ability to distinguish between essential and non-essential features, and cause-and-effect relationships. Knowledge of the subject is demonstrated against the background of understanding its place within the system of the given science and interdisciplinary connections. The answer is formulated in scientific terms, presented in literary language, is logical, evidence-based, and reflects the student's authorial position. The student demonstrates a high advanced level of competence formation. The intermediate certification has been passed.	A	100-96	HIGH
A complete and detailed answer to the question is provided, demonstrating a set of conscious knowledge about the subject; the main points of the topic are substantiated and thoroughly explained. The answer exhibits a clear structure and logical sequence, reflecting the essence of the concepts, theories, and phenomena discussed. Knowledge of the subject is demonstrated against the background of understanding its place within the system of the given science and interdisciplinary connections. The answer is presented in literary language using scientific terminology. Minor inaccuracies in defining concepts may occur but are corrected by the student independently during the response. The student demonstrates a high level of competence formation. The intermediate certification has been passed.	B	95-91	
A complete and detailed answer to the question is provided, demonstrating the ability to distinguish between essential and non-essential features, as well as cause-and-effect relationships. The answer is clearly structured, logical, and presented in literary language using scientific terminology. Minor inaccuracies or slight errors may occur but are corrected by the student with the instructor's guidance. The student demonstrates an intermediate elevated level of competence formation. The intermediate certification has been passed.	C	90-81	MEDIUM
A complete and detailed answer to the question is provided, demonstrating the ability to distinguish between essential and non-essential features, as well as cause-and-effect relationships. The answer is clearly structured, logical, and presented using scientific terminology. However, minor errors or inaccuracies were made, which were corrected by the student with the help of the instructor's "guiding" questions. The student demonstrates an intermediate sufficient level of competence formation. The intermediate certification has been passed.	D	80-76	

A complete but insufficiently sequential answer to the question is provided, demonstrating the ability to distinguish between essential and non-essential features, as well as cause-and-effect relationships. The answer is logical and presented in scientific terms. However, 1-2 errors may occur in defining key concepts, which the student struggles to correct independently. The student demonstrates a low level of competence formation. The intermediate certification has been passed.	E	75-71	LOW
An insufficiently complete and inadequately detailed answer is provided. The logic and sequence of presentation are disrupted. Errors are made in explaining concepts and using terminology. The student is unable to independently distinguish between essential and non-essential features or identify cause-and-effect relationships. The student can specify generalized knowledge and demonstrate basic principles using examples only with the instructor's assistance. The language and presentation require corrections and adjustments. The student demonstrates an extremely low level of competence formation. The intermediate certification has been passed.	E	70-66	
An incomplete answer is provided, with significant disruptions in logic and sequence of presentation. Major errors are made in defining the essence of the discussed concepts, theories, and phenomena, resulting from the student's failure to understand their essential and non-essential features and relationships. The answer lacks conclusions. The ability to elaborate on specific manifestations of generalized knowledge is not demonstrated. The language and presentation require corrections and adjustments. The student demonstrates a threshold level of competence formation. The intermediate certification has been passed.	E	65-61	THRESHOLD
An incomplete answer is provided, consisting of fragmented knowledge on the topic with significant errors in definitions. The presentation is fragmented and illogical. The student fails to recognize the connections between the given concept, theory, or phenomenon and other elements of the discipline. Conclusions, specificity, and evidence-based reasoning are absent. The language is ungrammatical. Additional and clarifying questions from the instructor do not lead to correction of the student's response, not only to the original question but also to other questions within the discipline. Competence is absent. The intermediate certification has not been passed.	Fx	60-41	COMPETENCE IS ABSENT
No answers were provided to the basic questions of the discipline. The student demonstrates no indicators of competence formation. Competence is absent. The intermediate certification has not been passed.	F	40-0	

4. Calculation of the final rating for the discipline

The final grade for the discipline (Rd) is calculated using the formula:

$$R_d = (R_{\text{prelim}} + R_{\text{ia}}) / 2$$

The final grade, calculated on a 100-point scale, is converted to a "pass/fail" system according to Table 6.

Table 6

Final grade for the discipline

Grade on a 100-point scale	Grade on a "pass/fail" system	ECTS grade
100-96	Pass	A
95-91		B
90-81		C
80-76		D
75-71		E
70-66		
65-61		
60-41	Fail	Fx
40-0		F

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