

**Assessment Procedure for the course «Medical informatics»
for students admitted in 2025 in the educational program
31.05.01 General Medicine
specialization (profile): General Medicine (Specialist Degree
Program), full-time mode of study for the 2026–2027 Academic Year**

1. General principles for calculating the rating for a 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 midterm assessment.

2. Calculation of the components of the preliminary rating

2.1. General principles

The discipline is studied during one semester (the third), therefore the preliminary rating for the discipline for the entire period of study (R_{prelim}) corresponds to the semester rating of the discipline in the third semester (R_{sem3}):

$$R_{\text{prelim}} = R_{\text{sem3}}$$

The semester rating of a 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 by discipline,

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

R_{bonus} – bonus rating,

R_{penalty} – penalty rating.

2.2. Calculation of the current rating in the semester

The current rating in the semester (R_{current}) is calculated as the arithmetic mean of all grades received by the student during the semester of studying the discipline when completing assignments of the current monitoring of academic performance, which include the following types of assignments: testing, Assessment of Practical Skills (Competencies), oral interviews based on control questions.

Assignments are graded by the instructor during each seminar class according to the assessment criteria presented in Table 1, using the traditional 5-point grading scale, where:

2 – Unsatisfactory;

3 – Satisfactory;

4 – Good;

5 – Excellent.

Table 1

Assessment Criteria for Current Evaluation Activities

Type of Assignment	Assessment Criteria	Rating on a 5-point scale			
		5	4	3	2
Testing	Percentage of correct answers	91-100	76-90	61-75	< 61
Assessment of Practical Skills (Competencies)	• Knowledge of theoretical foundations of the skill	Demonstrates knowledge	Demonstrates knowledge	Insufficiently confident knowledge	Lack of knowledge
	• Compliance with performance technique and outcome	Correct performance, successful outcome	Minor inaccuracies, successful outcome	Successful only after instructor correction	Unsuccessful attempt or refusal to perform
	• Confidence and consistency of performance	Confident and consistent	Some uncertainty but generally stable performance	Uncertain, repeated errors during repeated performance	
Interview on control questions	• 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	basically structured, logical	poorly structured, logic is broken	unstructured, fragmented, chaotic

At the end of the semester, R_{current} is calculated and converted into a 100-point rating scale in accordance with Table 2.

A student is considered to have no current academic debt if the value of R_{current} exceeds 61 points.

Table 2

Conversion to the 100-Point Rating Scale

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

2.3. Calculation of the rating of the student's independent work in the semester (Rindependent)

The independent study rating in a semester corresponds to the student's grade for completing the electronic independent study course associated with this discipline on the Electronic Information and Educational Portal of Volgograd State Medical University (VolgSMU).

Each semester of study includes completion of one electronic independent study course.

Independent study is assessed on a 100-point scale according to the criteria presented in Table 3.

Table 3

Assessment Criteria for Independent Study

Type of Assignment	Assessment Criteria	Оценка по 100-балльной шкале			
		91-100	76-90	61-75	< 61
Independent study in the form of an electronic course/course element on the VolgSMU EIEP	• Compliance with submission deadlines	Met	Met	Met	Not met
	• Completeness of studying materials not	Fully completed	Fully completed	Fully completed	Partially completed

	subject to direct assessment (presentations, videos, etc.)				
	Weighted average score for current tests and final test (current test weight = 1, final test weight = 3)	91-100	76-90	61-75	< 61

At the end of each study period, the student's R independent is calculated and converted into the 100-point scale according to Table 3.

A value of R independent greater than 61 points is considered satisfactory and indicates the absence of current academic debt.

2.4. Bonus and Penalty Ratings

Bonuses and penalties are awarded on a 100-point scale. The criteria are presented in Table 4.

Table 4

Bonuses and Penalties for the Course

Bonuses	Description	Points
Educational Research Work (UIRS)	Research project related to topics of the discipline	до + 5,0
Student Scientific Research Work (NIRS)	Certificate, diploma, award, or other evidence of participation in the department's Student Scientific Society	до + 5,0
Penalties	Description	Points
Disciplinary Violations	Absence from a lecture or practical class without a valid reason	- 2,0
	Failure to complete a practical-class assignment	- 2,0
	Repeated lateness to lectures or practical classes	- 1,0
	Violation of safety regulations	- 2,0
Material Damage	Damage to equipment or university property	- 2,0

3. Calculation of the Intermediate Assessment Rating

The intermediate assessment for the discipline is conducted in the form of a graded pass/fail examination and includes the following assessment type:

Oral interview.

The level of competency attainment is evaluated on a 100-point scale according to the criteria presented in Table 5.

Table 5

Criteria for assessing the level of assimilation of the discipline material and the formation of competencies

Grade Description	ECTS Grade	Points (Rating System)	Competency Level
A complete, detailed answer to the question is given, and the totality of conscious knowledge about an object is shown, manifested in the free operation of concepts, the ability to identify its essential and non-essential features, and cause-and-effect relationships. Knowledge about the object is demonstrated against the background of its understanding in the system of this science and interdisciplinary connections. The answer is formulated in terms of science, presented in literary language, logical, evidence-based, demonstrates the author's position of the student. The student demonstrates a high advanced level of competence formation. The intermediate certification has been completed.	A	100-96	HIGH
A complete, detailed answer to the question is given, the totality of conscious knowledge about the object is shown, the main provisions of the topic are evidently revealed; a clear structure and logical sequence can be traced in the answer, reflecting the essence of the concepts, theories, and phenomena being disclosed. Knowledge about the object is demonstrated against the background of its understanding in the system of this science and interdisciplinary connections. The answer is presented in literary language in terms of science. There may be errors in the definition of concepts, corrected by the student himself in the process of responding. The student demonstrates a high level of competence formation. The intermediate certification has been completed.	B	95-91	
A complete, detailed answer to the question is given, the ability to identify essential and non-essential signs, cause-and-effect relationships is shown. The answer is clearly structured, logical, and presented in literary language in terms of science. There may be mistakes or minor mistakes that are corrected by the student with the help of the teacher. The student demonstrates an average increased level of competence formation. Intermediate certification passed.	C	90-81	MEDIUM
A complete, detailed answer to the question is given, the ability to identify essential and non-essential signs, cause-and-effect relationships is shown. The answer is clearly structured, logical, and presented in terms of science. However, minor errors or omissions were made, corrected by the student with the help of "leading" questions from the teacher. The student demonstrates an average sufficient level of competence formation. The intermediate certification has been completed.	D	80-76	
A complete but insufficiently consistent answer to the question is given, but at the same time the ability to identify essential and non-essential signs and cause-and-effect relationships is shown. The answer is logical and stated in terms of science. There may be 1-2 mistakes in defining basic concepts that the student finds difficult to correct on their own. The student demonstrates a low level of competence formation. The intermediate certification has been completed.	E	75-71	LOW

An insufficiently complete and insufficiently detailed answer has been given. The logic and sequence of the presentation have violations. Mistakes were made in the disclosure of concepts and the use of terms. The student is not able to independently identify essential and non-essential signs and cause-and-effect relationships. A student can concretize generalized knowledge by proving its main points by examples only with the help of a teacher. Speech design requires corrections and corrections. The student demonstrates an extremely low level of competence formation. The intermediate certification has been completed.	E	70-66	
An incomplete answer is given, and the logic and sequence of the presentation have significant violations. Gross errors were made in determining the essence of the disclosed concepts, theories, and phenomena, due to students' misunderstanding of their essential and nonessential features and connections. There are no conclusions in the response. The ability to reveal specific manifestations of generalized knowledge is not shown. Speech design requires corrections and corrections. The student demonstrates a threshold level of competence formation. The intermediate certification has been completed.	E	65-61	THRESHOLD
An incomplete answer is given, representing scattered knowledge on the topic of the question with significant errors in definitions. There is fragmentary and illogical presentation. The student is not aware of the connection of this concept, theory, phenomenon with other objects of the discipline. There are no conclusions, concretization, and evidence-based presentation. The 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 of the discipline. There is no competence. The intermediate certification has not been completed.	Fx	60-41	COMPETENCY NOT ACHIEVED
No answers have been received on the basic questions of the discipline. The student does not demonstrate indicators for achieving competence formation. There is no competence. The intermediate certification has not been completed.	F	40-0	

4. Calculation of the Final Course Rating

The final course rating (Rcourse) is calculated according to the formula:

$$R_{\text{course}} = (R_{\text{prelim}} + R_{\text{intermediate}}) / 2$$

The final rating expressed on the 100-point scale is converted to the traditional 5-point grading scale according to Table 6.

Table 6

Final Course Grade

Rating on a 100-point scale	Assessment according to the system " passed - fail"	ECTS assessment
100-96	passed	A
95-91		B
90-81		C
80-76		D
75-71		E
70-66		
65-61		
60-41	fail	Fx
40-0		F

Reviewed and approved at the meeting of the department of clinical engineering and artificial intelligence technologies, protocol of «19» may 2026r. № 10.

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