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Информация о владельце:

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Должность: и.о. декана медико-биологического факультета

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MINISTRY OF SCIENCE AND HIGHER EDUCATION

RUSSIAN FEDERATION

Federal State Autonomous Educational Institution of Higher Education

NORTH-CAUCASUS FEDERAL UNIVERSITY

APPROVED

Assoc. Prof. Kubanov S.I.

PhD in Medical Sciences

Dean

Faculty of Medicine and Biology

ASSESSMENT TOOLS FUND FOR THE DISCIPLINE

Telemedicine

Name of the discipline (module)

- Specialty: 31.05.01 General Medicine
- Mode of training: Full-time
- Year of commencement of studies: 2026
- Delivered in Semester 9

Introduction

1. Intended for carrying out current control of academic performance progress and intermediate attestation in the discipline of Telemedicine for students of the specialty (majoring in) 31.05.01 General Medicine.
2. The ATF is an appendix to the program of the discipline (module) Telemedicine
3. Developer(s): Ivchenko G.S., Acting Head of the Department of Internal Medicine Propaedeutics (Full Name, Position)
4. Expert examination of the ATF has been completed.

Expert group:

Chairperson: Kubanov S.I., Associate Professor of the Department of Surgery, Orthopedics, and Traumatology (Full Name, Position)

Committee members: T.I. Dzhandarova, Head of the Department of Anatomy and Histology (Full Name, Position)

Pozdnyakova O.Yu., Professor of the Department of Therapy (Full Name, Position)

Employer organization representative: Vilensky I.L., Chief Physician of Independent CDL, LLC

Expert conclusion – the ATF allows evaluating the level of competency levels and is recommended to be employed in the educational process.

5. The validity period for the ATF shall be determined by the period of implementation of the educational program.

1. Description of Evaluation Criteria at Various Stages of Their Formation, Description of Evaluation Scales

Levels of formation of competence(s), indicator(s)	Descriptors			
	Minimum level not achieved (Unsatisfactory) 2 points	Minimum level (Satisfactory) 3 points	Intermediate level (Good) 4 points	High level (Excellent) 5 points
Competence: UK-1 Capable of carrying out a critical analysis of problematic situations based on a systematic approach and developing a strategy for action				
Learning outcomes for the discipline: Systemic and critical thinking Indicator: ID-1 UK-1 Identifies a problematic situation, analyzes and diagnoses it based on a systematic approach	Unable to identify a problematic situation	Highlights a problematic situation	Identifies a problematic situation and performs a multifactorial analysis and diagnosis based on a systematic approach	Identifies a problematic situation and performs a multifactorial analysis and diagnosis based on a systematic approach
Learning outcomes for the discipline: Systemic and critical thinking Indicator: ID-2 UK-1 Searches, selects, and organizes information to determine alternative strategic solutions in a problematic situation	Unable to search, select, and organize information	Searches, selects, and organizes information	Searches, selects, and organizes information to determine solutions to a problem situation	Searches, selects, and organizes information to determine alternative strategic solutions in a problematic situation
Learning outcomes for the discipline: Systemic and critical thinking Indicator: ID-3 UK-1 Determines and evaluates the risks of possible solutions to a problem situation, and selects the optimal solution	Unable to identify and assess risks	Identifies and evaluates risks	Determines and evaluates the risks of possible solutions to a problematic situation	Determines and evaluates the risks of possible solutions to a problematic situation, and selects the optimal solution.
Competence: UK-4 is able to apply modern communication technologies, including in a foreign language(s), for academic and professional interaction				

Learning outcomes for the discipline: Communication Indicator: ID-1 UK-4 Selects an acceptable style of business communication in the state language(s) and a foreign language(s), as well as verbal and non-verbal means of interaction with partners in oral and written forms	Unable to choose an appropriate business communication style	Selects an acceptable style of business communication in the state language	Selects an acceptable style of business communication in the state language, as well as verbal means of interaction with partners in both oral and written forms	Selects an appropriate style of business communication in the state language(s) and foreign language(s), as well as verbal and non-verbal means of interaction with partners in oral and written forms
Learning outcomes for the discipline: Communication Indicator: ID-2 UK-4 Uses information and communication technologies to improve the efficiency of professional interaction, search for the necessary information in the process of solving standard communication tasks in the state language(s) and foreign language(s)	Cannot use information and communication technologies	Uses information and communication technologies to improve the efficiency of professional interaction in the state language	Uses information and communication technologies to improve the efficiency of professional interaction and to search for the necessary information in the process of solving standard communication tasks in the state language	Uses information and communication technologies to improve the efficiency of professional interaction and to search for the necessary information in the process of solving standard communication tasks in the state language(s) and foreign language(s).
Learning outcomes for the discipline: Communication Indicator: ID-3 UK-4 Evaluates the effectiveness of applied communication technologies in professional interaction in the state language(s) and foreign language(s),	Unable to assess the effectiveness of the communication technologies used	Evaluates the effectiveness of applied communication technologies in professional interaction in the state language	Evaluates the effectiveness of applied communication technologies in professional interaction in the state language, and selects the optimal ones	Evaluates the effectiveness of applied communication technologies in professional interaction in the state language(s) and foreign language(s), and selects the optimal ones

makes the choice of optimal				
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The evaluation of the competency formation level in the discipline is carried out on the basis of the Regulations on conducting current control of academic progress and intermediate attestation of students in higher education educational programs – Bachelor's programs, Specialist's programs, Master's programs – at the Federal State Autonomous Educational Institution of Higher Education NORTH-CAUCASUS FEDERAL UNIVERSITY in its current edition.

ASSESSMENT TOOLS FOR CHECKING THE LEVEL OF COMPETENCY DEVELOPMENT

Task Number	Correct Answer	Content of the Question	Competency
Semester 9			
1.	b	ACTIVITIES RELATED TO DISTANCE MEDICAL CARE ARE CALLED: a) Telematics; b) Telemedicine; c) Medical Telematics; d) Telemetry.	UK-1
2.	c	ONLINE SERVICES ARE AVAILABLE: a) Telemedicine consultations b) Telemonitoring Video conferences c) All options are correct	UK-1
3.	b	WHO IS RESPONSIBLE FOR THE OUTCOME OF TREATMENT DETERMINED DURING A TELEMEDICAL CONSULTATION? a) The consulted doctor b) The attending doctor c) The head of the telemedicine consultation center d) The consultant e) The patient	UK-1
4.	c	THE GREATEST ECONOMIC EFFECT OF TELEMEDICAL CONSULTATIONS IS OBSERVED: a) In emergency situations (disasters, accidents) b) When there is a long distance between the consultant and the patient c) When a large number of telemedical consultations are conducted d) When complex telemedical consultations are conducted	UK-1
5.	d	THE ADVANTAGES OF TELEMEDICAL CONSULTATION ARE: a) The ability to receive a consultation from a specialist who is remote from the patient b) The speed and timeliness of receiving a consultation c) The improvement of medical care quality d) All options are correct	UK-1
6.	c	The main application of telemedicine is	UK-1

		a) a television review of medical science achievements b) the transmission of operations on television c) telemedicine consultation d) a teleconference of health ministries	
7.	a	X-RAY IS RELATED TO THE FOLLOWING TYPE OF MEDICAL INFORMATION: a) Visual static; b) Sound; c) Alphabet-numeric; d) Dynamic	UK-1
8.	e	ALIMENTARY HYPERGLYCEMIA IS A CONSEQUENCE OF a) excess insulin; b) lack of counter-insulin hormones; c) glucosuria; d) emotional arousal; e) intake of carbohydrate-rich food	UK-1
9.	a	Obesity, without changing the number of adipocytes, is possible a) yes b) no	UK-1
10.	a	Hyperventilation syndrome can cause hypertensive dehydration a) Yes b) No	UK-1
11.	b	ORGANIZATION OF A TELEMEDICAL SESSION ACCORDING TO THE "POINT-TO-POINT" SCHEME IS: a) A telemedicine lecture; b) A telemedicine consultation; c) A telemedicine symposium;	UK-1
12.	c	VIDEO CONFERENCING IS: a) A method of exchanging video images between two or more points equipped with the appropriate hardware and software. b) A method of exchanging audio between two or more points equipped with the appropriate hardware and software c) A method of exchanging video images, audio, and data between two or more points equipped with the appropriate hardware and software d) A method of exchanging data between two or more points equipped with the appropriate hardware and software	UK-1
13.	c, d	Vitamin D deficiency is associated with the following metabolic changes a) hypercalcemia b) hyperphosphatemia c) hypocalcemia d) hypophosphatemia e) activation of lipid peroxidation	UK-1
14.	a,b,c,e	Compensatory reactions in dehydration are a) increase in aldosterone production b) centralization of blood circulation	UK-1

		c) increase in vasopressin secretion d) decrease in renin secretion e) decrease in daily urine output.	
15.	Telemedicine	The use of modern technologies and telecommunications tools for the remote provision of medical and consulting services is	UK-1
16.	According to the etiology, there are: Hypoxic (exogenous). Respiratory (respiratory). Hemic (blood). Circulatory. Tissue (histotoxic). Overload. Mixed. Technogenic. According to the prevalence of the process, there are: General, affecting the entire body. Local (regional), affecting a part of the body. According to the severity, there are mild, moderate, severe, and critical (lethal) forms.	Classification of hypoxia	UK-1
17.	Telematics	The field of computer science that covers the field of telecommunications is	UK-1
18.	Classical (water) fasting. Dry fasting. Urine fasting. Mixed fasting. Combined fasting	Types of therapeutic fasting	UK-1
19.	A highly effective catalyst. A universal solvent. A catabolic function. Normalization of the digestive process. Regulation of body temperature and blood circulation. Protection of joints and organs from destruction	The main functions of water in the body	UK-1
20.	c	THE MAIN AREAS OF TELESURGERY ARE: 1. Control of surgical activity in the field 2. Remote medical interventions and surgical operations based on the use of remotely controlled robotics 3. Remote control of medical equipment in an interactive mode during diagnostic procedures	UK-1

		4. Monitoring the use of operating rooms Answer options: a) 1,2 b) 1,4 c) 2,3 d) 2,4 e) 3,4	
21.	b	ACTIVITIES RELATED TO DISTANCE MEDICAL CARE ARE CALLED: a) Telematics; b) Telemedicine; c) Medical Telematics; d) Telemetry.	UK-1
22.	c	ONLINE SERVICES ARE AVAILABLE: a) Telemedicine consultations b) Telemonitoring Video conferences c) All options are correct	UK-1
23.	b	WHO IS RESPONSIBLE FOR THE OUTCOME OF TREATMENT DETERMINED DURING A TELEMEDICAL CONSULTATION? a) The consulted doctor b) The attending doctor c) The head of the telemedicine consultation center d) The consultant e) The patient	UK-1
24.	c	THE GREATEST ECONOMIC EFFECT OF TELEMEDICAL CONSULTATIONS IS OBSERVED: a) In emergency situations (disasters, accidents) b) When there is a long distance between the consultant and the patient c) When a large number of telemedical consultations are conducted d) When complex telemedical consultations are conducted	UK-1
25.	d	THE ADVANTAGES OF TELEMEDICAL CONSULTATION ARE: a) The ability to receive a consultation from a specialist who is remote from the patient b) The speed and timeliness of receiving a consultation c) The improvement of medical care quality d) All options are correct	UK-1
26.	c	The main application of telemedicine is a) a television review of medical science achievements b) the transmission of operations on television c) telemedicine consultation d) a teleconference of health ministries	UK-1
27.	a	X-RAY IS RELATED TO THE FOLLOWING TYPE OF MEDICAL INFORMATION: a) Visual static; b) Sound;	UK-1

		c) Alphabet-numeric; d) Dynamic	
28.	e	ALIMENTARY HYPERGLYCEMIA IS A CONSEQUENCE OF a) excess insulin; b) lack of counter-insulin hormones; c) glucosuria; d) emotional arousal; e) intake of carbohydrate-rich food	UK-1
29.	a	Obesity, without changing the number of adipocytes, is possible a) yes b) no	UK-1
30.	b	ACTIVITIES RELATED TO DISTANCE MEDICAL CARE ARE CALLED: a) Telematics; b) Telemedicine; c) Medical Telematics; d) Telemetry.	UK-1

31. Description of the Evaluation Scale

Within the framework of the rating system, students' academic progress in each discipline is evaluated during current control and intermediate attestation. The rating system for assessing students' knowledge is based on the use of a combination of control activities to check the covered material (checkpoints), optimally located throughout the entire time interval of studying the discipline. The principles of the rating system for assessing students' knowledge are based on the requirements described in the Regulations on the organization of the educational process based on the rating system for assessing students' knowledge at NCFU.

32. Criteria for Evaluating Competencies

The grade **Excellent** shall be awarded to a student if the theoretical content of the course has been mastered completely, without gaps; the material is presented exhaustively, consistently, clearly, and logically; the student freely copes with tasks, questions, and other types of knowledge application; uses additional material in the answer; all tasks provided for by the program are completed, and the quality of their execution is evaluated by a number of points close to the maximum; analyzes the obtained results; demonstrates independence when performing tasks.

The grade **Good** is to be awarded to a student if the theoretical content of the course is mastered completely, the necessary practical competencies are mainly formed, all educational tasks provided for by the training program are completed, and the quality of their execution is sufficiently high. The student firmly knows the material, presents it competently and strictly on the merits of the matter, without allowing significant inaccuracies in answering the question.

The grade **Satisfactory** is awarded to a student in case the theoretical content of the course has been mastered in part only, but the gaps are not of a significant nature, most of the tasks provided for by the program are completed, but contain errors, the student allows inaccuracies and insufficiently correct wording when answering the question, and violations of logical sequence are observed in the presentation of the program material.

The grade **Unsatisfactory** is awarded to a student if they do not know a significant part of the program material, allow significant errors, perform practical works with great difficulty and uncertainty, the necessary practical competencies are not formed, most of the educational tasks provided for by the training program are not completed, and the quality of their execution is evaluated by a number of points close to the minimum.