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ФИО: Стегний Кирилл Владимирович
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Federal State Budget Educational Institution
of Higher Education
Pacific State Medical University
of the Ministry of Health of the Russian Federation

APPROVED BY

Head of the Department of Humanities and
Social Studies and Economy
_____ / Chernaya I.P./
"28th" of April 2025

COLLECTION OF ASSESSMENT TOOLS
Б1.О.49 Fundamentals of project management in healthcare
of the basic educational program
of Higher Education

Specialty	**31.05.03 Dentistry** **for international students (in English)** (code, name)
Degree	Specialist's degree
Profile	02 "Healthcare" (in the field of providing health care in patients with dental pathology)
Mode of study	**Full-time**
Period of mastering the BEP	**5 years** (nominal length of study)
Institute	of Humanities and Social Studies and Economy

Vladivostok, 2025

1. INTRODUCTION

1.1. **Collection of Assessment Tools** is a document that regulates the format, content, and types of assessment tools for continuous assessment, interim examination and final (state final) examination, and graded criteria for each type of assessment tools.

1.2. Assessment tools allows to evaluate the development of universal, general professional, and professional competencies (UCs, GPCs and PCs respectively) outlined in Federal State Educational Standard of Higher Education and defined in the basic educational program of higher education for the specialty 31.05.03 Dentistry for international students (in English), profile 02 "Healthcare" (in the field of providing health care in patients with dental pathology).

(BEP HE for the 31.05.03 Dentistry for international students (in English) specialty, section 3 Learning Outcomes Requirements of the Basic Educational Program of Higher Education)

2. DOCUMENT BODY

2.1. Types of Assessment, Formats of Assessment Tools

No.	Types of assessment	Assessment Tools Format
1	**Continuous assessment**	**Tests**
		Interview questions
		Mini-Case Studies
2	**Interim assessment**	**Tests**

3. The contents of assessment tools for continuous and interim examination are prepared by the teacher of the course

Tests for continuous and interim assessment

	Code	Competence description / name of labor function / name of work activity / text
S	31.05.03	Dentistry for international students (in English)
C	UC-2	Is able to manage a project at all stages of its development and implementation
I		**ANSWER LEVEL 1 TEST QUESTIONS (ONE CORRECT ANSWER)**
		01 THE PRIMARY PURPOSE OF A PROJECT CHARTER IS a) to serve as a detailed, day-to-day task list for the project team; +b) to authorize the project manager to apply organizational resources to project activities; c) to provide a complete risk assessment for the project's execution phase; d) to define the technical specifications of the project's final deliverable. **02 IN THE CONTEXT OF THE PROJECT MANAGEMENT TRIANGLE (TRIPLE CONSTRAINT), IF THE PROJECT SCOPE IS INCREASED AND BOTH THE SCHEDULE AND BUDGET MUST REMAIN FIXED, THE MOST LIKELY TRADE-OFF IS THAT**

		+a) project quality will decrease; b) the number of project stakeholders will be reduced; c) the project manager's authority will be increased; d) the project's strategic objectives will be automatically adjusted. **03 THE BEST EXAMPLE OF A SMART PROJECT OBJECTIVE IS** a) "improve customer satisfaction"; b) "develop a great new mobile application by the end of the year"; +c) "reduce the average patient wait time in Clinic A from 30 minutes to 15 minutes by December 1st"; d) "make the company website more user-friendly as soon as possible". **04 THE CRITICAL PATH IN A PROJECT NETWORK DIAGRAM REPRESENTS** a) the sequence of activities with the highest resource cost; b) the most technically difficult sequence of activities; c) the shortest possible time to complete the project; +d) the longest sequence of dependent activities, determining the minimum project duration. **05 ACCORDING TO BRUCE TUCKMAN'S MODEL, DURING THE _____ STAGE OF TEAM DEVELOPMENT TEAM MEMBERS START TO RESOLVE THEIR DIFFERENCES, APPRECIATE COLLEAGUES' STRENGTHS, AND WORK COLLABORATIVELY** a) forming; b) storming; +c) norming; d) performing.
		ANSWER LEVEL 2 TEST QUESTIONS (MULTIPLE CORRECT ANSWERS)
		01 TWO STATEMENTS THAT ACCURATELY DESCRIBE THE KEY DIFFERENCES BETWEEN A PROJECT AND ONGOING OPERATIONS ARE a) “a project is temporary with a definite beginning and end, while operations are ongoing and repetitive” +b) “projects are undertaken to create a unique product, service, or result, while operations sustain the business by producing standard outputs” c) “projects are always larger in scale and budget than operational activities” +d) “a project team is disbanded upon project completion, while an operational team is permanent” **02. DURING THE PROJECT PLANNING PHASE, TWO DOCUMENTS THAT ARE PRIMARILY USED TO DEFINE AND CONTROL WHAT IS INCLUDED IN THE PROJECT ARE** a) Communication Management Plan

		+b) Work Breakdown Structure (WBS) +c) Project Scope Statement d) Stakeholder Register **03 IDENTIFYING PROJECT RISKS, _____ AND _____ ARE CONSIDERED VALID EXAMPLES OF INTERNAL RISKS (ORIGINATING FROM WITHIN THE PROJECT)** a) A sudden change in government regulations affecting the project +b) Key team member leaving the project unexpectedly. c) A major supplier going bankrupt +d) Inaccurate initial time estimates for critical activities **04 IN EARNED VALUE MANAGEMENT (EVM), TWO OF FORMULAS USED TO FORECAST FUTURE PROJECT PERFORMANCE BASED ON CURRENT TRENDS ARE** +a) Estimate at Completion (EAC) = BAC / CPI b) Schedule Variance (SV) = EV - PV c) Cost Performance Index (CPI) = EV / AC +d) To-Complete Performance Index (TCPI) = (BAC - EV) / (BAC - AC) **05 _____ AND _____ ARE CORE CHARACTERISTICS OF THE AGILE PROJECT MANAGEMENT METHODOLOGY, AS OPPOSED TO THE TRADITIONAL WATERFALL APPROACH** +a) Emphasis on adaptive planning and iterative delivery b) Detailed requirement specification is required before any development starts +c) High degree of customer collaboration and flexibility to change d) Strict, sequential phases with a single delivery at the end of the project
		ANSWER LEVEL 3 TEST QUESTIONS (MATCHING QUESTIONS)
		01. MATCH THE PROJECT MANAGEMENT PROCESS GROUP WITH ITS PRIMARY OBJECTIVE 1. Initiating 2. Planning 3. Executing 4. Monitoring & Controlling 5. Closing A. Completing the work defined in the project management plan to satisfy the project specifications.. Formalizing B. Acceptance of the project or phase and bringing it to an orderly end. C. Defining and authorizing the project or a project phase. D. Tracking, reviewing, and regulating the progress and performance of the project. E. Establishing the total scope of the project and defining the course of action required to attain project objectives.

Answer:
1 - C
2 - E
3 - A
4 - D
5 - B

02. MATCH THE KEY PROJECT DOCUMENT WITH ITS CORRECT DESCRIPTION

1. Project Charter
2. Work Breakdown Structure (WBS)
3. Stakeholder Register
4. Risk Register

A. A hierarchical decomposition of the total scope of work to be carried out by the project team.
B. A document that identifies the project, authorizes the project manager, and provides high-level requirements and objectives.
C. A repository of all identified risks, their analysis, and planned response strategies.
D. A document that contains all details related to the project's identified stakeholders.

Answer:
1 - B
2 - A
3 - D
4 - C

03. MATCH THE PROJECT PERFORMANCE METRIC WITH ITS CORRECT FORMULA OR MEANING

1. Schedule Performance Index (SPI)
2. Cost Performance Index (CPI)
3. Schedule Variance (SV)
4. Cost Variance (CV)

A. EV - AC; indicates whether the project is under or over budget.
B. EV / AC; indicates the cost efficiency of the work performed.
C. EV - PV; indicates whether the project is ahead of or behind schedule.
D. EV / PV; indicates the schedule efficiency of the work performed.

Answer:
1 - D
2 - B
3 - C
4 - A

04. MATCH THE CHARACTERISTIC OR TERM) WITH THE PROJECT MANAGEMENT METHODOLOGY IT IS MOST CLOSELY ASSOCIATED

1. Iterations and Sprints

		2. Sequential Phases (Requirements, Design, Implementation, etc.) 3. Change is expected and managed through a backlog. 4. A single, final deliverable at the end of the project lifecycle. A. Waterfall (Predictive) B. Agile (Adaptive) Answer: 1 - B 2 - A 3 - B 4 - A **05. MATCH THE TYPE OF RISK WITH THE MOST APPROPRIATE GENERIC RESPONSE** 1. A risk that, if it occurs, would have a severe negative impact on a critical project objective. 2. A risk that, if it occurs, would create a significant positive opportunity for the project. 3. A low-priority risk with minimal potential impact. 4. A risk that can be effectively handled by transferring ownership (e.g., to a supplier). A. Exploit B. Mitigate C. Transfer D. Accept Answer: 1 - B (Mitigate — reduce probability/impact of a high-priority threat) 2 - A (Exploit — ensure the opportunity is realized) 3 - D (Accept — no proactive action for a low-priority item) 4 - C (Transfer — shift impact to a third party)

Assessment criteria

"Pass" – over 60% correct answers of questions of every level

"Fail" – less than 60% correct answers of questions of every level

Interview questions

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.03	Dentistry for international students (in English)
C	UC-2	Is able to manage a project at all stages of its development and implementation
I		**ANSWER THE QUESTIONS** 1. Define a "project" according to modern project management theory. How does it fundamentally differ from "operations" or "business-as-usual" activities? Provide a real-world example to illustrate the difference. 2. Describe the five classic process groups of project management (Initiating, Planning, Executing, Monitoring & Controlling, Closing). What is the primary objective and key output of each group?

		3. Explain the concept of the "Project Management Triangle" or "Triple Constraint" (Scope, Time, Cost). Discuss the interrelationship between these constraints. What is typically considered the fixed vertex in most projects, and why? 4. What is a project charter? What is its primary purpose in the project initiation phase, and what key information should it contain to be effective? 5. What are project stakeholders? Describe a common stakeholder analysis/classification model (e.g., Power/Interest Grid) and explain how it is used to develop an appropriate engagement strategy. 6. Explain the SMART criteria for setting project objectives. Provide an example of a poorly defined objective and transform it into a SMART one. 7. What is the purpose of a Work Breakdown Structure (WBS)? Describe the principle of the "100% Rule" in the context of creating a WBS. 8. Define project scope and product scope. What is "scope creep," and what are its primary causes and negative impacts on a project? 9. Describe the difference between a Gantt Chart and a Network Diagram (PERT/CPM). What unique information does a Critical Path Method (CPM) analysis provide to a project manager? 10. What are the main components of a project's cost baseline? Briefly explain the difference between analogous, parametric, and bottom-up cost estimating techniques. 11. Define project risk. Differentiate between positive risks (opportunities) and negative risks (threats). Outline the four basic risk response strategies for threats. 12. What is the purpose of a Responsibility Assignment Matrix (RAM), often formatted as a RACI chart? Explain the meaning of the acronym RACI. 13. Describe the Plan-Do-Check-Act (PDCA) cycle (Deming Cycle) and explain its relevance to the project monitoring and control process. 14. What are Key Performance Indicators (KPIs) in project management? Provide examples of KPIs for tracking project scope, schedule, and cost performance. 15. Explain the purpose of Earned Value Management (EVM). Define the three key values: Planned Value (PV), Earned Value (EV), and Actual Cost (AC). What do the Cost Performance Index (CPI) and Schedule Performance Index (SPI) indicate? 16. What is a change control process? Why is a formal process necessary, and what are the typical steps involved in reviewing and approving a change request? 17. Compare and contrast the traditional Waterfall (predictive) and Agile (adaptive) project management methodologies. What are the key characteristics, advantages, and typical use cases for each? 18. According to Bruce Tuckman's model, what are the five

		stages of team development? Briefly describe the dynamics and leadership challenges at each stage. 19. What is the primary goal of the project closure phase? List the key administrative and contractual activities that must be completed during this phase. 20. Why is conducting a "Lessons Learned" session a critical part of project closure? What should be the focus of this session to ensure organizational knowledge is captured and improved for future projects?

Assessment criteria

"Pass" is given to a student who has shown a sufficiently strong knowledge of the basic concepts of the subject; is able to complete specific practical tasks outlined in the program with no outside help, use recommended reference material, and correctly evaluate the results.

"Fail" is given to a student who has significant gaps in knowledge of the basic concepts of the subject, is not able reach the correct solution to a specific practical task outlined in the curriculum even with outside help.

Standardized case studies and checklists for the **Б1.О.49 Fundamentals of project management in healthcare** course

Case Study No.1

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.03	Dentistry for international students (in English)
C	UC-2	Is able to manage a project at all stages of its development and implementation
I		**READ THE PROVIDED CASE DESCRIPTION AND GIVE DETAILED ANSWERS TO THE QUESTIONS**
		The dean of the Medical University has tasked a student project team with "improving student life on campus." The team, eager to start, immediately begins brainstorming ideas like a new café, more social events, and better Wi-Fi. After two weeks of enthusiastic but disorganized meetings, they realize they have dozens of ideas but no clear direction, budget, or way to measure success. Team morale is dropping.
Q	1	Question: What fundamental project initiation document is missing, and what key elements should it have contained to prevent this situation?

Case Study No.1 Checklist

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.03	Dentistry for international students (in English)
C	UC-2	Is able to manage a project at all stages of its development and implementation
I		**READ THE PROVIDED CASE DESCRIPTION AND GIVE DETAILED ANSWERS TO THE QUESTIONS**
		The dean of the Medical University has tasked a student project team with "improving student life on campus." The team, eager to start, immediately begins brainstorming ideas like a new café, more social events, and better Wi-Fi. After two weeks of enthusiastic but disorganized meetings, they

		realize they have dozens of ideas but no clear direction, budget, or way to measure success. Team morale is dropping.
Q	1	Question: What fundamental project initiation document is missing, and what key elements should it have contained to prevent this situation?
A		Correct answer The team is missing a Project Charter. A proper charter would have provided a clear SMART objective (e.g., "Increase student satisfaction scores related to campus social spaces by 15% within the academic year"), defined key deliverables, identified the project manager with authority, and outlined high-level constraints and assumptions. This would have given the team a focused starting point.
R2	Very good	A complete, accurate, logical answer with deep understanding, argumentation, competent speech, and no mistakes was given
R1	Good/Satisfactory	The answer is generally complete and correct; 1-2 minor errors were made, corrected on when pointed out, minor flaws in the presentation or speech. The answer partially answers the question, there are inaccuracies, significant errors, insufficient argumentation, speech is incorrect in places
R0	Fail	The answer is incomplete, there are significant errors, lack of understanding, logic, literacy, and independence

Case Study No.2

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.03	Dentistry for international students (in English)
C	UC-2	Is able to manage a project at all stages of its development and implementation
I		**READ THE PROVIDED CASE DESCRIPTION AND GIVE DETAILED ANSWERS TO THE QUESTIONS**
		A project team is developing a website for the university's volunteer program. The initial scope, agreed upon with the client, is a clean site with a calendar, sign-up forms, and contact information. During development, the client representative casually asks, "Can you also add a private social network for volunteers with chat and profile pages? And maybe integrate it with the university's main authentication system? It should be easy, right?" The team lead agrees to "look into it" without formal approval.
Q	1	Question: What is this phenomenon called, and what is the correct formal process the team lead should follow to address the client's new requests?

Case Study No.2 Checklist

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.03	Dentistry for international students (in English)

C	UC-2	Is able to manage a project at all stages of its development and implementation
I		**READ THE PROVIDED CASE DESCRIPTION AND GIVE DETAILED ANSWERS TO THE QUESTIONS**
		A project team is developing a website for the university's volunteer program. The initial scope, agreed upon with the client, is a clean site with a calendar, sign-up forms, and contact information. During development, the client representative casually asks, "Can you also add a private social network for volunteers with chat and profile pages? And maybe integrate it with the university's main authentication system? It should be easy, right?" The team lead agrees to "look into it" without formal approval.
Q	1	Question: What is this phenomenon called, and what is the correct formal process the team lead should follow to address the client's new requests?
A		Correct answer This is Scope Creep. The correct process is the Change Control Process. The team lead should: 1. Document the new request in a Change Request Form. 2. Analyze the impact on scope, schedule, cost, and resources. 3. Submit the request to the proper Change Control Board (or project sponsor) for formal approval/rejection. 4. Only if approved, update the project plan and scope baseline. Casual "look into it" agreements undermine project control.
R2	Very good	A complete, accurate, logical answer with deep understanding, argumentation, competent speech, and no mistakes was given
R1	Good/Satisfactory	The answer is generally complete and correct; 1-2 minor errors were made, corrected on when pointed out, minor flaws in the presentation or speech. The answer partially answers the question, there are inaccuracies, significant errors, insufficient argumentation, speech is incorrect in places
R0	Fail	The answer is incomplete, there are significant errors, lack of understanding, logic, literacy, and independence

Case Study No.3

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.03	Dentistry for international students (in English)
C	UC-2	Is able to manage a project at all stages of its development and implementation
I		**READ THE PROVIDED CASE DESCRIPTION AND GIVE DETAILED ANSWERS TO THE QUESTIONS**
		You are managing a project to organize an international student conference. Key activities are: A) Booking a venue (5 days), B) Sending invitations (3 days, can start after A), C) Preparing materials (4 days), D) Confirming speakers (7 days, can start after A), E) Finalizing the agenda (2 days, needs C

		and D to be finished). The project sponsor demands to know the absolute minimum time needed to complete the project and which tasks cannot be delayed.
Q	1	Question: Draw a simple network diagram (or describe the sequence) and identify the Critical Path and its total duration.

Case Study No.3 Checklist

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.03	Dentistry for international students (in English)
C	UC-2	Is able to manage a project at all stages of its development and implementation
I		**READ THE PROVIDED CASE DESCRIPTION AND GIVE DETAILED ANSWERS TO THE QUESTIONS**
		You are managing a project to organize an international student conference. Key activities are: A) Booking a venue (5 days), B) Sending invitations (3 days, can start after A), C) Preparing materials (4 days), D) Confirming speakers (7 days, can start after A), E) Finalizing the agenda (2 days, needs C and D to be finished). The project sponsor demands to know the absolute minimum time needed to complete the project and which tasks cannot be delayed.
Q	1	Question: Draw a simple network diagram (or describe the sequence) and identify the Critical Path and its total duration.
A		Correct answer Critical Path: A -> D -> E. Total duration: 5 (A) + 7 (D) + 2 (E) = 14 days. Explanation: Path A-B-E takes 5+3+2=10 days. Path A-C-E takes 5+4+2=11 days. The path A-D-E is the longest (14 days), making it critical. Activities A, D, and E have zero float; any delay in them will delay the entire project.
R2	Very good	A complete, accurate, logical answer with deep understanding, argumentation, competent speech, and no mistakes was given
R1	Good/Satisfactory	The answer is generally complete and correct; 1-2 minor errors were made, corrected on when pointed out, minor flaws in the presentation or speech. The answer partially answers the question, there are inaccuracies, significant errors, insufficient argumentation, speech is incorrect in places
R0	Fail	The answer is incomplete, there are significant errors, lack of understanding, logic, literacy, and independence

Case Study No.4

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.03	Dentistry for international students (in English)
C	UC-2	Is able to manage a project at all stages of its development and implementation
I		**READ THE PROVIDED CASE DESCRIPTION AND**

		GIVE DETAILED ANSWERS TO THE QUESTIONS
		In a project to create a medical education app, the design sub-team insists on a complex, animated interface for better user engagement. The programming sub-team argues this will take three times longer to develop and cause technical bugs. Meetings have turned into heated arguments, with each side blaming the other for being "unrealistic" and "inflexible." Progress has stalled.
Q	1	Question: According to Tuckman's model, what stage of team development is this team experiencing? What should the project manager do to move the team forward?

Case Study No.4 Checklist

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.03	Dentistry for international students (in English)
C	UC-2	Is able to manage a project at all stages of its development and implementation
I		**READ THE PROVIDED CASE DESCRIPTION AND GIVE DETAILED ANSWERS TO THE QUESTIONS**
		In a project to create a medical education app, the design sub-team insists on a complex, animated interface for better user engagement. The programming sub-team argues this will take three times longer to develop and cause technical bugs. Meetings have turned into heated arguments, with each side blaming the other for being "unrealistic" and "inflexible." Progress has stalled.
Q	1	Question: According to Tuckman's model, what stage of team development is this team experiencing? What should the project manager do to move the team forward?
A		Correct answer The team is in the Storming stage, characterized by conflict and competition between ideas. The project manager should: 1. Facilitate a structured meeting to address the conflict, focusing on project goals (e.g., "We need a functional app by the deadline"). 2. Guide the team to use objective data (e.g., user research, technical feasibility studies) to make decisions, not opinions. 3. Possibly bring in a technical expert for an objective assessment. 4. Reinforce team norms and the common goal to transition to the Norming stage.
R2	Very good	A complete, accurate, logical answer with deep understanding, argumentation, competent speech, and no mistakes was given
R1	Good/Satisfactory	The answer is generally complete and correct; 1-2 minor errors were made, corrected on when pointed out, minor flaws in the presentation or speech. The answer partially answers the question, there are inaccuracies, significant errors, insufficient argumentation, speech is incorrect in places

R0	Fail	The answer is incomplete, there are significant errors, lack of understanding, logic, literacy, and independence

Case Study No.5

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.03	Dentistry for international students (in English)
C	UC-2	Is able to manage a project at all stages of its development and implementation
I		**READ THE PROVIDED CASE DESCRIPTION AND GIVE DETAILED ANSWERS TO THE QUESTIONS**
		By a project's 6-month checkpoint (planned duration: 10 months, total budget: $100,000), the following data is reported: Planned Value (PV) = $60,000, Earned Value (EV) = $50,000, Actual Cost (AC) = $70,000.
Q	1	Question: Calculate the Schedule Performance Index (SPI) and Cost Performance Index (CPI). Interpret the results – is the project ahead or behind schedule? Under or over budget? What is the estimated cost at completion based on current trends?

Case Study No.5 Checklist

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.03	Dentistry for international students (in English)
C	UC-2	Is able to manage a project at all stages of its development and implementation
I		**READ THE PROVIDED CASE DESCRIPTION AND GIVE DETAILED ANSWERS TO THE QUESTIONS**
		By a project's 6-month checkpoint (planned duration: 10 months, total budget: $100,000), the following data is reported: Planned Value (PV) = $60,000, Earned Value (EV) = $50,000, Actual Cost (AC) = $70,000.
Q	1	Question: Calculate the Schedule Performance Index (SPI) and Cost Performance Index (CPI). Interpret the results – is the project ahead or behind schedule? Under or over budget? What is the estimated cost at completion based on current trends?
A		Correct answer • SPI = EV / PV = 50,000 / 60,000 = 0.83. The project is behind schedule (less than 1 means less work completed than planned). • CPI = EV / AC = 50,000 / 70,000 = 0.71. The project is over budget (less than 1 means cost overrun for work done). • Estimate at Completion (EAC) = BAC / CPI = 100,000 / 0.71 ≈ $140,845. Based on current cost inefficiency, the total project cost is forecast to be about $140,845.
R2	Very good	A complete, accurate, logical answer with deep understanding, argumentation, competent speech, and no mistakes was given
R1	Good/Satisfactory	The answer is generally complete and correct; 1-2 minor errors were made, corrected on when pointed out, minor flaws in the

		presentation or speech. The answer partially answers the question, there are inaccuracies, significant errors, insufficient argumentation, speech is incorrect in places
R0	Fail	The answer is incomplete, there are significant errors, lack of understanding, logic, literacy, and independence

4. Assessment criteria for learning outcomes

"Pass" is given to a student who has shown a sufficiently strong knowledge of the basic concepts of the subject; is able to complete specific practical tasks outlined in the program with no outside help, use recommended reference material, and correctly evaluate the results.

"Fail" is given to a student who has significant gaps in knowledge of the basic concepts of the subject, is not able reach the correct solution to a specific practical task outlined in the curriculum even with outside help.