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MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RUSSIAN FEDERATION

Federal State Autonomous Educational Institution of Higher Education

"Moscow Polytechnic University"

APPROVE
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of Economics and Management
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"18" 02 2023

WORKING PROGRAM OF THE DISCIPLINE

"Project Activity"

Field of study
38.03.02 Management

Educational program (profile)
"Business Process Management"

Qualification (degree)
Bachelor

Form of study
Half-time

Moscow 2023

Программу составили:

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1. The goals of mastering the discipline

The purpose of the discipline:

The purpose of mastering the discipline "Project activity" is to prepare students for professional activities and develop their skills and abilities for solving non-standard tasks and implementing projects in cooperation with other students.

Discipline tasks:

- development of students' skills in presenting and defending the results achieved;
- development of students' teamwork skills;
- increasing motivation for self-education;
- formation of project work skills;
- ensuring that students master the basic norms of professional activity;
- getting students experience in using the main professional tools in solving non-standard tasks within the framework of projects.

2. The place of the discipline in the structure of the BEP of the bachelor's degree

The discipline "Project activity" refers to a part of the disciplines formed by the participants in educational relations, Block 1 of the main educational program of the bachelor's degree.

The discipline "Project activity" is studied in the first, second, third, fourth years of study.

3. The list of planned learning outcomes in the discipline, correlated with the planned results of mastering the educational program

As a result of mastering the discipline, students form the following competencies and the following learning outcomes should be achieved:

Code and name of competencies	**Competence achievement indicators**
UK-2. Able to determine the range of tasks within the set goal and choose the best ways to solve them, based on current legal regulations, available resources and restrictions	IUK-2.1. Formulates a set of tasks within the framework of the project goal, the solution of which ensures its achievement IUK-2.2. Identifies the links between the tasks set, the main components of the project and the expected results of its implementation IUK-2.3. Selects the best methods for planning, distributing areas of responsibility, solving problems, analyzing results, taking into account current legal regulations, available conditions, resources and restrictions, and opportunities for use

4. Structure and content of the discipline

The program of the discipline "Project activity" includes the following types of educational activities:

Types of educational work, including independent work of students:

- seminars and practical classes
- independent work of students

Form of intermediate certification:

- offset

The total labor intensity of the discipline is 14 credit units, i.e. 504 academic hours (of which 252 hours are seminars and practical classes (classroom work), 252 hours are students' independent work).

The complexity of the discipline by semester is distributed from 2 to 7 semesters. For 2,3,5,6 semesters, 2 credit units were allocated, i.e. 72 academic hours (of which 36 hours are seminars and practical classes (classroom work), 36 hours are independent work of students), 3 credit units are allocated for semesters 4 and 6, i.e. 108 academic hours (including 54 hours - seminars and practical classes (classroom work), 54 hours - independent work of students).

The form of intermediate certification in each semester is a test.

The structure and content of the discipline "Project activity" by terms and types of work are reflected in Appendix 1.

The content of the sections of the discipline

The main section of the discipline "Project activity" consists in the implementation of the proposed projects by students. The implementation of each project includes the following stages:

1. Concept development and project planning.
    - Getting project input.
    - Collection of project materials and analysis.
    - Development of the concept of the solution and the image of the product

result of the project.
- Formation of a task for development.
- Development of a project passport, taking into account the timing and resources.
- Presentation and defense of the solution concept.

2. Project development
   - Distribution of tasks and functions among project participants.
   - Choice of development and design tools.
   - Implementation of the planned development sub-stages.
   - Presentation and discussion of the results of each sub-stage within the student project team, exchange of information within the team.
   - Testing the proposed solutions and making adjustments to the development.
   - Formulation of requirements for the implementation phase, if necessary, preparation of a request for consumables.

3. Getting a product result.
   - Selection of tools for the implementation of the product.
   - Obtaining materials for implementation.
   - Getting a product result.
   - Approbation and testing.

4. Presentation of the results of the project.
   - Formulation of product results.
   - Preparation of the final presentation on the project.
   - Protection of the project and presentation of the results of the work.
   - Discussion of the results of the project.

Project milestones may overlap in time. Tasks within the stages and sub-stages are formed individually for each project. The list of tasks depends on the specifics of the project and the preparation of the student.

5. Educational technologies

The following technologies are at the heart of the methodology of teaching the discipline "Project activity":

1. Technology of project-based learning.

This technology involves the organization of the educational process in accordance with the algorithm for the phased solution of the design problem.

- The project involves a joint educational and cognitive activity of a group of

students aimed at forming a concept, setting goals and objectives, expected results, planning the progress of work, searching for available and optimal resources, phased implementation of the work plan, presentation of work results, their comprehension and reflection.
- Business game - simulation of various situations related to the development and adoption of joint decisions, collective discussion of issues, reconstruction of functional interaction in a team.

2. Interactive technologies.

This technology is aimed at organizing the educational process, which involves the active and non-linear interaction of all participants, the achievement on this basis of a personally significant educational result for them.

- using interactive tools to generate ideas (brainstorming);
- use of interactive tools for project management and division of roles within the project team and division into subgroups to solve practical problems;
- round tables, group discussions, communication on professional topics within the framework of the ongoing project.

3. Information and communication educational technologies.

This technology is aimed at organizing the educational process based on the use of technical means of working with information.

- conducting master classes from experts and specialists from various fields necessary for the implementation of the project;
- computer modeling and analysis of results;
- preparation, presentation and discussion of the work process and the results obtained at the intermediate and final plenary sessions;
- group reflection on the results of work.

6. Evaluation tools for current monitoring of progress, intermediate certification based on the results of mastering the discipline and educational and methodological support for students' independent work.

The current control of students' progress is carried out in the process of students' work within the framework of the project during the semester.

When performing each stage or sub-stage of the project, the teacher who manages the project checks whether the student demonstrates the correspondence of the skills and abilities to the indicators given in the following tables, whether he operates with the acquired skills and abilities, whether he is able to apply them in situations of uncertainty. At the same time, the mistakes made, inaccuracies, difficulties in analytical operations, the transfer of skills to new, non-standard situations are taken into account in the final characteristic obtained by the student in

the process and as a result of the project.

In parallel with this, within each stage, the student performs meaningful tasks necessary to achieve the intended product result of the project, and accumulates points for their implementation. Points are set taking into account the quality and timing of the tasks. According to the results of the implementation of the stages of the project, on the basis of the points obtained, an assessment of the product result of the student's project activity is formed. At the end of each semester, a project defense takes place, which is a presentation by the project team with a report on the work done and a presentation of the product result obtained, which is also taken into account in the overall assessment of the student's work.

6.1. Fund of assessment tools for conducting intermediate certification of students in the discipline (module)

6.1.1. List of competencies

As a result of mastering the discipline, the following universal competencies are formed:

Competency Code	As a result of mastering the educational program, the student must have
UK-2	the ability to determine the range of tasks within the set goal and choose the best ways to solve them based on the current legal norms of the available resources and restrictions

In the process of mastering the educational program, the individual components of these competencies are formed in stages in the course of mastering the discipline by students in accordance with the curriculum and calendar schedule of the educational process.

6.1.2. Description of indicators and criteria for assessing competencies formed on the basis of the results of mastering the discipline, description of assessment scales

The indicator of competence assessment at various stages of their formation is the achievement by students of the planned learning outcomes in the discipline.

UK-2 the ability to determine the range of tasks within the set goal and choose the best ways to solve them based on the current legal norms of the available resources and restrictions		
Index	**Evaluation criteria**	
	Not credited	Passed

IUK-2.1. Formulates a set of tasks within the framework of the project goal, the solution of which ensures its achievement IUK-2.2. Identifies the links between the tasks set, the main components of the project and the expected results of its implementation IUK-2.3. Selects the best methods for planning, distributing areas of responsibility, solving problems, analyzing results, taking into account current legal regulations, available conditions, resources and restrictions, and opportunities for use	The student demonstrates a lack of knowledge of various techniques and methods of socialization of the individual and social interaction; the ability to build relationships with people around, with colleagues; practical experience of participating in teamwork, in social projects, distribution of roles in a team environment	The student demonstrates from a sufficient to a free level of knowledge of various techniques and methods of socialization of the individual and social interaction; the ability to build relationships with people around, with colleagues; practical experience of participating in teamwork, in social projects, distribution of roles in a team environment

The scale of assessment of the results of the intermediate certification and its description:

Form of intermediate attestation: test.

Intermediate attestation of students in the form of a test is carried out on the basis of the intermediate progress of students - the accumulated number of points received during the semester for the quality and timeliness of project work, based on the results of the defense of the project, as well as on the basis of the teacher's marks on the level of formation of the student's competencies.

In order to successfully pass the intermediate certification in the discipline "Project activity", the student must score a threshold value during the semester - at least 60 points for intermediate performance. In the case of a fractional number of points, the result is reduced to an integer value according to the laws of arithmetic rounding.

The assessment of the degree of achievement by students of the planned learning outcomes in the discipline is carried out by the teacher conducting classes in the discipline, by the method of expert assessment and using the fund of evaluation tools.

Evaluation scale	Evaluation criteria
Passed	The student demonstrates the correspondence of skills and abilities to the indicators given in the tables, operates with the acquired skills, skills. In this case, minor errors, inaccuracies, difficulties in analytical operations, transferring skills to new, non-standard situations can be made. The threshold value of points has been reached - at least 60 points for the completed project tasks during the implementation of the project.
Not credited	The student demonstrates incomplete correspondence of skills and abilities to those given in the tables of indicators, significant errors are made, the lack of skills and abilities is manifested in a number of indicators, the student experiences significant difficulties in operating skills when transferring them to new situations.

	Less than 60 points scored for completed project tasks during project implementation.

The Evaluation Funds are presented in Annex 2 to the Work Programme.

7. Information support of discipline.

a) Basic literature:

- Popov, Yu. I. Project management: textbook / Yu. I. Popov, O. V. Yakovenko. - Moscow: INFRA-M, 2021. - 208 p. — (Textbooks for the MBA program). - ISBN 978-5-16-002337-3. - Text : electronic. - URL: https://znanium.com/catalog/product/1153780 (date of access: 03/14/2022). – Access mode: by subscription.
- Potasheva, G.A. Project management (project management): study guide / G.A. Potasheva. - Moscow: INFRA-M, 2020. - 224 p. + Add. materials [Electronic resource]. — (Higher education: Bachelor's degree). — DOI 10.12737/17508. - ISBN 978-5-16-010873-5. - Text : electronic. - URL: https://znanium.com/catalog/product/1055100 (date of access: 03/14/2022). – Access mode: by subscription.
- Romanova, M.V. Project management: textbook / M.V. Romanova. - Moscow: Publishing House "FORUM": INFRA-M, 2020. - 256 p. : ill. - (Higher education). - ISBN 978-5-8199-0308-7. - Text : electronic. - URL: https://znanium.com/catalog/product/1039340 (date of access: 03/14/2022). – Access mode: by subscription.

b) Additional literature:

- Bryksina, O.F. Information and communication technologies in education: textbook / O.F. Bryksina, E.A. Ponomareva, M.N. Sonina. - Moscow: INFRA-M, 202___2. — 549 p. — (Higher education: Bachelor's degree). - DOI 10.12737/textbook_59e45e228d2a80.96329695. - ISBN 978-5-16-012818-4. - Text : electronic. - URL: https://znanium.com/catalog/product/1843834 (date of access: 03/14/2022). – Access mode: by subscription.
- Ilyin, V.V. On the other side of projects. Notes of a consultant: a practical guide / V. V. Ilyin. - 4th ed. - Moscow: Knowledge Laboratory, 2020. - 379 p. — (Projects, programs, portfolios). - ISBN 978-5-00101-766-0. - Text : electronic. - URL: https://znanium.com/catalog/product/1094839 (date of access: 03/14/2022). – Access mode: by subscription.

c) Software:

To carry out projects within the framework of the discipline "Introduction to

project activities", students can use the entire range of necessary standard and specialized licensed software from the general list, depending on the stage of project implementation and the tasks performed.

d) Internet resources:

- Project activities section on the Moscow Poly website - http://mospolytech.ru/index.php?id=3247
- Polytechnic digital education platform - https://lms.mospolytech.ru/
- Electronic Patent Library -http://bankpatentov.ru/node/10403
- "LAN" -www.e.lanbook.com
- Educational platform Urayt -https://urait.ru
- Znanium.com - www.znanium.com
- TRIZ -http://www.metodolog.ru/00026/00026.html
- Presentation “The Design Thinking Process of the Stanford School”https://www.slideshare.net/irke/design-thinking-process
- Systems Engineering - Book "Systems Engineering Thinking" - http://techinvestlab.ru/files/systems_engineering_thinking/systems_engineering_thinking_2015.pdf
- "Future Technological Leaders of Russia" (educational program of summer scientific and educational schools "Lift to the Future") - https://lift-bf.ru

Logistics support of discipline.

To train students in the discipline "Project activity", the general classroom fund of the university and specialized classrooms of the Center for Project Activities for joint work of students, computer classes, workshops and laboratories are used, depending on the stage of the project and the tasks performed.

Audiences	Audience type	Equipment
A-12, st. Bolshaya Semenovskaya, 38	Audience	Tables, chairs, shelving, bedside tables, a cooler, a clothes rack, a wall specially painted to be able to write with a marker.
B-508, st. Bolshaya Semenovskaya, 38	Audience	Desks 2-seater, chairs, table, projector, screen.

9. Guidelines for independent work of students

When organizing independent work within the framework of mastering the discipline

"Project activity", students are recommended to use information about the list of projects, dates of events, registration methods, which is regularly updated on the university website in the Project activity section.

Independent work includes:

- independent implementation of project tasks;
- independent search and analysis of information necessary for solving problems;
- independent study of the materials necessary for the implementation of the project;
- visiting thematic exhibitions and conferences on the subject of the project;
- preparation of presentations and accompanying materials on the project.

Independent acquisition of missing knowledge in certain tasks and disciplines is possible both with the help of relevant professional literature, and through the development of modern online courses from leading universities and companies. Recommended online course platforms -https://ru.coursera.org,https://openedu.ru.

It is recommended to participate in regularly held lectures and sessions on modern technological challenges and innovations, for example, at the Agency for Strategic Initiatives -https://asi.ru.

To search for additional funding and develop the project in the future, it is recommended that you familiarize yourself with the regulations of various competitions for supporting youth projects and independently participate in these competitions:

- competition "Umnik" issues grants to support innovative projects - http://umnik.fasie.ru
- Preactum - a program for the development of project, practice-oriented and entrepreneurial activities among young peoplehttp://preactum.ru

10. Guidelines for the teacher

When preparing a project before the start of the semester, the teacher needs to plan the stages of the project in advance, as well as agree on the complexity of the project and the necessary tools and competencies that students may need along the way.

When working during the semester, the main task of the teacher is to organize the activities of students to implement the project. The teacher should be ready to advise students on issues related to the project, however, in the process of work, it is necessary to motivate students to work independently and solve the tasks set, to form their responsibility for the result of the project, and also to motivate students to complete the work on time and on time. It is important to encourage students to choose their own tools for solving tasks, as well as to communicate with teachers of

other disciplines in case of difficulties in performing specialized tasks. When implementing a project, it is important to pay attention to the quality and speed of work, as well as evaluate the performance of tasks by students from a professional point of view.

Students need to be immersed as deeply as possible in the problems of the project. To do this, the teacher is recommended to invite as many experts on the subject of the project as possible, as well as to encourage students to communicate with specialized specialists. If there is a partner with whom the project is being implemented, it is recommended to organize regular meetings to receive feedback and adjust the overall design course.

At the end of each stage, it is recommended to conduct a reflection of the work done. It is important to discuss all aspects of the project - both from the point of view of the process of its implementation, and from the point of view of the professional activities of students - it is important to analyze the tools used and encourage students to systematize them.

The structure and content of the discipline "Project activity" in the direction of training 38.03.02 Management **(bachelor)**

The total labor intensity (volume) of the discipline "Project activity" is 14 credit units.

The volume of discipline by type of training sessions (in hours)

Part-time education							
Type of study work	Total hours	Semester					
		2	3	4	5	6	7
Classroom activities (total)	**116**	**18**	**18**	**26**	**18**	**26**	**18**
Including:							
Lectures	-	-	-	-	-	-	-
Practical exercises (PZ)							
Seminars (C)	116	-	-	-	-	-	-
Laboratory work (LR)	-	-	-	-	-	-	-
Independent work (total)	**388**						
Including:							
Preparation for practical exercises							
Type of intermediate certification - test	-	-	-	-	-	-	-
Total labor intensity hour / credit. units	**504**	**72**	**72**	**108**	**72**	**108**	**72**

Table 1

1. Competence level indicators

In the process of mastering this discipline, the student forms and demonstrates the following universal competencies:					
COMPETENCES		**LIST OF COMPONENTS**	**TECHNOLOGY OF FORMATION OF COMPETENCES**	**FORM OF ASSESSMENT TOOL ****	**LEVELS OF DEVELOPMENT OF COMPETENCES**
INDEX	**FORMULATION**				
UK-2	UK-2. Able to determine the range of tasks within the set goal and choose the best ways to solve them, based on current legal regulations, available resources and restrictions	IUK-2.1. Formulates a set of tasks within the framework of the project goal, the solution of which ensures its achievement IUK-2.2. Identifies the links between the tasks set, the main components of the project and the expected results of its implementation IUK-2.3. Selects the best methods for planning, distributing areas of responsibility, solving problems, analyzing results, taking into account current legal regulations, available conditions, resources and restrictions, and opportunities for use	Project based learning technology Interactive technologies Information and Communication Technologies	DI KS UO P	Threshold level: The student demonstrates sufficient skills to assess the effectiveness of using the cooperation strategy to achieve the final goal, to determine his role in the team; identify and interpret the peculiarities of the behavior of selected groups of people with whom it works/interacts, take them into account in its activities (the choice of categories of groups of people is carried out by an educational organization depending on the goals of training - by age characteristics, by ethnicity or religion, socially unprotected segments of the population, etc. .P.); a sufficient level of skills in determining and predicting the results (consequences) of personal actions, planning a sequence of steps to achieve a given result; a sufficient level of skills in effective interaction with other team members, incl. information exchange skills Advanced level: The student demonstrates the confident use of methods for evaluating the effectiveness of using the cooperation strategy to achieve the final goal, methods for determining their role in the team;

					identifying and interpreting the behavioral characteristics of selected groups of people with whom it works / interacts, taking them into account in its activities (the choice of categories of groups of people is carried out by an educational organization depending on the goals of training - by age characteristics, by ethnicity or religion, socially unprotected segments of the population, etc. .P.); a confident level of skills in determining and predicting the results (consequences) of personal actions, planning a sequence of steps to achieve a given result; a confident level of skills in effective interaction with other team members, incl. High level: The student demonstrates the free use of methods for evaluating the effectiveness of using the cooperation strategy to achieve the ultimate goal, to determine their role in the team; identifying and interpreting the behavioral characteristics of selected groups of people with whom it works / interacts, taking them into account in its activities (the choice of categories of groups of people is carried out by an educational organization depending on the goals of training - by age characteristics, by ethnicity or religion, socially unprotected segments of the population, etc. .P.); fluency in the skills of determining and predicting the results (consequences) of personal actions, planning a sequence of steps to achieve a given result; fluency in the skills of effective interaction with other team members, incl. exchange of information, experience,

** - abbreviation of forms of evaluation tools, see Appendix 2

2. Criteria for assessing the formation of competencies

UK-2. Able to determine the range of tasks within the set goal and choose the best ways to solve them, based on current legal regulations, available resources and restrictions		
Index	**Evaluation criteria**	
	Not credited	Passed
IUK-2.1. Formulates a set of tasks within the framework of the project goal, the solution of which ensures its achievement IUK-2.2. Identifies the links between the tasks set, the main components of the project and the expected results of its implementation IUK-2.3. Selects the best methods for planning, distributing areas of responsibility, solving problems, analyzing results, taking into account current legal regulations, available conditions, resources and restrictions, and opportunities for use	The student demonstrates a lack of knowledge of various techniques and methods of socialization of the individual and social interaction; the ability to build relationships with people around, with colleagues; practical experience of participating in teamwork, in social projects, distribution of roles in a team environment	The student demonstrates from a sufficient to a free level of knowledge of various techniques and methods of socialization of the individual and social interaction; the ability to build relationships with people around, with colleagues; practical experience of participating in teamwork, in social projects, distribution of roles in a team environment

3. The list of evaluation tools for the discipline "Project activity"

OS number	Name of the evaluation tool	Brief description of the evaluation tool	Presentation of the evaluation tool in the FOS
1	business game (DI)	Joint activity of a group of students and a teacher in order to solve educational, practical and professionally oriented tasks through game modeling of a real project situation. Allows you to evaluate the ability to analyze and solve non-standard problems.	Sample development tasks
2	Round table, discussion (COP)	They allow students to be included in the process of discussing a controversial issue, problems and assess their ability to argue their own point of view.	List of discussion topics on the project for a round table, discussion
3	Oral questioning, interview (UO)	A means of control, organized as a special conversation between a teacher and a student on topics related to project activities, and designed to determine the amount of knowledge of a student in a particular section, topic, problem, etc.	General questions on the topic of the project for an oral survey / interview

4	Creative task (TK)	A partially regulated task that has a non-standard solution and allows diagnosing skills, integrating knowledge of various fields, and arguing one's own point of view.	Themes of group creative tasks
5	Report, message (DS)	Product independent work of a student, which is a public speech on the presentation of the results of solving a specific educational, practical, educational, research or scientific topic	List of indicative topics for preparing a message or report
6	Project (P)	The format for evaluating work to obtain the final product as a result of planning and implementing a set of educational, practical and research tasks. Allows you to assess the ability of students to independently construct their knowledge in the process of solving practical problems and problems, navigate in the information space and the level of formation of analytical, research skills, skills of practical and creative thinking. Can be done individually or by a group of students.	Expert sheets for individual project evaluation, individual written task

3.1 List of topics for the round table/discussion.

1. Discussion of ideas for future projects, drawing up a work plan for the project.
2. Formulation of ideas and plans on the subject of the project.
3. Change/correction of the time frame of the project stages.
4. Discussion of the distribution of stage tasks by project teams and individual performers.
5. Selected design and project implementation tools.
6. Coordination of the result of work on various tasks of the stage.
7. Project risk analysis.
8. Elaboration of additional ways to support the project.
9. Elaboration of the format for presenting the project to the conference.
10. Discussion of the future project, its continuation.
11. Difficulties of the project and ways to solve them.
12. Presentation of work to the customer and discussion of the project.
13. Analysis of feedback from the customer/expert and making changes to the TOR.
14. Changes and additions to the project, taking into account comments and suggestions.
15. Preparation for public defense of the project.

3.1.1 Scale and criteria for assessing the level of mastering the disciplinary parts of competencies acquired through participation in a discussion/round table

The degree of development of competence	**Criteria for assessing the level of mastery of competencies**
High level	the student actively participates in group discussions of all issues of the round table, demonstrates the results of independent analytical work with information sources, argues his point of view
Advanced level	the student actively participates in group discussions of all issues of the round table, demonstrates the results of independent analytical work with information sources, does not always fully argue his point of view
Threshold level	the student participates in the discussion of only part of the questions of the round table, using only basic materials, does not argue his point of view
Threshold not reached	the student does not participate in the discussion of controversial issues of the round table, does not have his own point of view

3.2 General questions on the topic of the project for an oral survey / interview to assess the development of the disciplinary parts of competencies.

1. What problem does your project solve?
2. What is the object of design - how are you going to solve the problem posed for the project?
3. Are there alternative ways to solve the problem, if so, which ones?
4. Are there analogues of your project on the market, if so, which ones?
5. What is the advantage of your project in comparison with existing analogues or alternative ways of solving the problem?
6. At what stage is your project?
7. What are the prospects and further opportunities for the development of the project?
8. Project Stakeholders – Who is interested in your project? (target audience, potential customer, user portrait, sales markets)
9. What product result are you going to bring the project to?
10. Describe the key risks of the project.
11. Formulate the main stages of the project implementation.
12. Describe your role in the project team.

13. The resource base necessary for the implementation of the project.
14. Funding sources for your project.
15. What production capacities are needed to implement the project?

3.2.1 Scale and criteria for assessing the level of mastering the disciplinary parts of competencies acquired through participation in an oral survey / interview

The degree of development of competence	**Criteria for assessing the level of mastery of competencies**
High level	the student freely answers questions on the topic of the project, is able to present a logical chain of project decision-making and justify his point of view during an oral survey
Advanced level	the student confidently answers questions on the topic of the project, is able to present a logical chain of making project decisions and justify his point of view during an oral survey, he is able to correct a few errors on his own
Threshold level	the student is able to answer general questions on the topic of the project, can build logically sound conclusions during an oral survey
Threshold not reached	the student is not able to answer questions on the topic of the project or convey its content, does not have basic concepts about the subject of discussion on the topic of the oral survey

3.3. Topics of general group creative tasks for assessing the development of disciplinary parts of competencies.

1. Collect information on the object and present it in the form of a presentation.
2. Find and analyze analogues of the product and draw a conclusion on their differences from each other, their advantages and disadvantages, suggest what niche this or that product occupies.
3. Conduct a survey / survey of interested or potential consumers / stakeholders of the product being developed, systematize the answers, draw conclusions.
4. Make a list of criteria and quality characteristics that the developed object must meet.
5. Check the compliance of the initially collected requests/requirements with the final result.
6. Develop a list of alternative concepts for a specific task.
7. Formulate in general the proposed concept of the object being developed.

8. Make a list of possible changes/improvements to existing objects, taking into account the full life cycle of the product.
9. Make a list of materials or a list of the necessary characteristics of these materials for the implementation of the project.
10. Create a project schedule.
11. Prepare the necessary alienable information for the team members working in the project, conduct a joint discussion of the project and its adjustment.
12. Based on the proposed solution, draw conclusions about the appropriateness of the decisions made in connection with the proposed target audience and market niche.
13. Prepare and make a presentation on any stage of the project under development.
14. Description of the work of the project team, the customer, the identified differences and how to solve them, as well as planning the structure of the project teams and individual tasks and reasonable methods for stimulating work efficiency.
15. Preparing and conducting presentations for customer representatives.

3.4. Expert sheet for assessing the collective achievement of project results

Project name: _____		
Project Criteria	**Evaluation criterion**	
Project content		**Points from 0 to 2**
The relevance of the project and its problems	The project was completed on a topical and important issue	
Practical significance of the project (demand and applicability)	The project is in demand by a specific customer or has a clear target audience	
Collected material and analysis	Sufficiency of the material reflecting the analysis of the situation, target audience, requirements and alternative concepts	
Interdisciplinarity of the project	All necessary aspects from different fields of activity are taken into account	
Technical level of the project (toolkit)	Appropriate and modern means of project implementation have been selected	
Professional level of the	All elements of the project are developed	

project (project depth and completeness of stages)	in due measure, deeply and professionally	
Testing / Approbation / Implementation	Testing / approbation or implementation of the result of the project was carried out	
Relevance of the solution to the problem and its originality	The proposed solution is fully consistent with the task.	
Prospects of the project (development paths)	Project results have the potential to scale	
Comments: _____ _____ _____		
Organizational frame of the project		**Points from 0 to 2**
Project readiness level	Compliance with the deadlines for completing tasks	
Stages of the project and the general timing of the stages	Correspondence of the distribution of project stages and their timing to the task	
Efficiency of distribution of tasks and work of project participants	Clear and reasonable distribution of tasks between project participants	
Accounting for risks and working with them	Working with unforeseen situations	
Working with customers and/or experts	Systematic interaction with customers and experts in the framework of the project	
Reporting documentation, project materials	The necessary reporting materials on the project were presented	
Project promotion	Implemented activities to promote and broadcast the project and/or its results	
General organizational level of the project	Student contribution to the overall project management framework	
Project presentation		

Presentation Quality	Presentation visibility and quality	
Report quality	Structured presentation and performance quality, timing	
Answers on questions	Team members freely answer questions	
Final assessment of the project: 30-40 points - the team successfully implemented the project and achieved the planned results, 15-29 points - the team coped with the task with some shortcomings, 0-14 points - the team did not cope with the task and did not achieve the planned results		