

Документ подписан простой электронной подписью
Информация о владельце:
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Дата подписания: 13.04.2026 15:03:37
Уникальный программный ключ:
8db180d1a3f02ac9e60521a5672742735c18b1d6

**MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RUSSIAN
FEDERATION**

**Federal State Autonomous Educational Institution of Higher Education
"Moscow Polytechnic University"
(Moscow Poly)**

APPROVE
Vice-President

for International Affairs
/Yu.D. Davydova/
" 30 " 05 2022



Dean,
Faculty of Economics and
Management
/A.V. Nazarenko/
" 30 " 05 2022

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
Part-time

Moscow 2022

1. The goals of mastering the discipline.

Aim mastering the discipline "Project activity" is:

-learning the basics and methods of planning project stages.

To the main tasks mastering the discipline "Project activity" should include:

- mastering the role of a competent organization of project activities for the effective solution of problems of varying complexity;
- studying the basics of time management in project activities;
- acquisition of skills in the formation and formulation of tasks for individual and joint (collective) project activities;
- application of innovative creative technologies and techniques to create and improve creative ideas;
- acquiring the skills of correct design of the finished project for presentation (including to the customer).

2. The place of discipline in the structure of the EP.

The discipline "Project activity" refers to the number of academic disciplines of the part formed by the participants of educational relations (B.1.2.19.3) of the educational program of the bachelor's degree.

The discipline "Project activity" is interconnected logically and methodically with the following disciplines:

- “Introduction to project activities;
- Project management;
- Fundamentals of technological entrepreneurship;
- Educational practice (introductory practice);
- Industrial practice (undergraduate practice).

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 (module), students develop the following competencies and the following learning outcomes should be achieved as a stage in the formation of the relevant competencies:

Competency code	As a result of mastering the educational program, the student must have	List of planned learning outcomes by discipline
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	know: – project features; – basics of project management; – areas of application of modern approaches to project activities and project management in the field of management on examples from real practice be able to: – carry out the formation and management of projects; – apply modern approaches to project activities and project management in the field of management using examples from real practice – coordinate the activities of performers own: – skills of step-by-step control over the implementation of business plans – skills in solving tasks and analyzing their results.

4. Structure and content of the discipline.

Part-time education:

The total labor intensity of the discipline is 14 credit units, i.e. 504 academic hours (of which 396 hours are independent work of students).

Sections of the discipline "Project activity" are studied in the first, second, third and fourth years.

2-7 semester:seminars - 108 hours, form of control - test.

The second semester - seminars 18 hours, independent work - 66 hours, form of control - test.

The third semester - seminars 18 hours, independent work - 66 hours, form of control - test.

The fourth semester - seminars 18 hours, independent work - 66 hours, form of control - test.

Fifth semester - seminars 18 hours, independent work - 66 hours, form of control - test

Sixth semester - seminars 18 hours, independent work - 66 hours, form of control - test

Seventh semester - seminars 18 hours, independent work - 66 hours, form of control - 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.

Project work.

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 sub-stages of development.
- 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.

Only students who have completed all types of educational work provided for by the work program of the discipline are allowed to intermediate certification. The current control of students' progress is carried out in the process of students' work within the framework of the project during the semester. Samples of control questions and tasks for conducting current control, questions for the exam are given in the appendix. When performing current control, it is possible to use test material. Samples of control questions and tasks for conducting current control are given in the appendix. When implementing the undergraduate program, the organization has the right to use e-learning and distance learning technologies. All materials are placed in the LMS of the Moscow Poly (<https://online.mospolytech.ru/>).

When teaching people with disabilities, e-learning and distance learning technologies should provide for the possibility of receiving and transmitting information in forms accessible to them.

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 indicating the stages of their formation in the process of mastering the educational program

As a result of mastering the discipline (module), the following competencies are formed:

Competency code	As a result of mastering the educational program, the student must have
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

In the process of mastering the educational program, these competencies, including their individual components, are formed in stages during the development of disciplines (modules), practices 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

An indicator of competency assessment at various stages of their formation is the achievement by students of the planned learning outcomes in the discipline (module).

OK -6-ability for self-organization and self-education				
Index	Evaluation criteria			
	Less than 60 points	60-70 points	71-80 points	81-100 points
PC -6 - the ability to participate in the management of a project, a program for the introduction of technological and product innovations or an organizational change program				
Index	Evaluation criteria			
	Less than 60 points	60-70 points	71-80 points	81-100 points
know: - features of projects; - basics of project management; - areas of application of modern approaches to project activities and project management in the field of management on examples from real practice.	The student demonstrates the complete absence or insufficient compliance of the following knowledge: the basics of project management, the scope of modern approaches to project activities. Does not attend discipline classes and does not fulfill the tasks of the project curator	The student demonstrates incomplete compliance with the following knowledge: the basics of planning. Significant mistakes are made, lack of knowledge is manifested, for a number of indicators, the student experiences significant difficulties in operating knowledge when transferring it to new situations. Attends classes partly in the discipline and partly fulfills the tasks of the curator for the project	The student demonstrates partial compliance with the following knowledge: the basics of project management, the scope of modern approaches to project activities, but minor errors, inaccuracies, and difficulties in analytical operations are allowed. Attends classes partially in the discipline and fulfills the tasks of the curator for the project	The student demonstrates full compliance with the following knowledge: the basics of project management, the scope of modern approaches to project activities, freely operates with the acquired knowledge. Attends classes in the discipline and fulfills the tasks of the curator for the project in full
be able to: - carry out the formation and management of projects; - apply modern approaches to project activities and project management in the field of management using examples from real practice; - to coordinate the activities of performers.	The student is not able or insufficiently able to carry out the formation and management of projects, apply modern approaches to project activities and project management in the field of management, coordinate the activities of performers.	The student demonstrates incomplete compliance with the following skills: to form and manage projects, apply modern approaches to project activities and project management in the field of management, coordinate the activities of performers. Significant mistakes are made, lack of skills is manifested, for a number of indicators, the student experiences significant difficulties in operating with skills when transferring them to new situations.	The student demonstrates partial compliance with the following skills: to form and manage projects, apply modern approaches to project activities and project management in the field of management, coordinate the activities of performers. Skills are mastered, but minor errors, inaccuracies, difficulties in analytical operations, transferring skills to new, non-standard situations are allowed.	The student demonstrates full compliance with the following skills: to form and manage projects, apply modern approaches to project activities and project management in the field of management, coordinate the activities of performers. Freely operates with acquired skills, applies them in situations of increased complexity.

own: -skills for step-by-step control over the implementation of business plans; - Skills for solving tasks and analyzing their results.	The student demonstrates the complete absence or insufficient compliance of the following knowledge: the skills of step-by-step control over the implementation of business plans, the skills of solving tasks and analyzing their results.	The student demonstrates incomplete compliance with the following knowledge: the skills of step-by-step control over the implementation of business plans, the skills of solving tasks and analyzing their results. Significant mistakes are made, lack of knowledge is manifested, for a number of indicators, the student experiences significant difficulties in operating knowledge when transferring it to new situations.	The student demonstrates partial compliance with the following knowledge: the skills of step-by-step control over the implementation of business plans, the skills of solving tasks and analyzing their results, but minor errors, inaccuracies, and difficulties in analytical operations are allowed.	The student demonstrates full compliance with the following knowledge: the skills of step-by-step control over the implementation of business plans, the skills of solving tasks and analyzing their results, freely operates with the acquired knowledge.

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
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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 mistakes 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. Educational and methodological support of discipline.

a) basic literature:

1. Project management: textbook / V. N. Ostrovskaya, G. V. Vorontsova, O. N. Momotova [and others]. - 2nd ed., revised. - St. Petersburg: Lan, 2021. - 400 p. - ISBN 978-5-8114-4043-6. — Text: electronic // Doi: electronic library system. - URL: <https://e.lanbook.com/book/114700933>

2. Chusavitina, G. N. Mathematical methods of project management: textbook / G. N. Chusavitina, V. N. Makashova, I. K. Skokova. - 2nd ed. - Moscow: FLINTA, 2021. - 130 p. - ISBN 978-5-9765-3794-1. — Text: electronic // Doi: electronic library system. - URL: <https://e.lanbook.com/book/104933>

b) additional literature:

1. Guide to the body of knowledge on project management (PMBOK® Guides): per. from English. : [16+] / . — 5th ed. - Moscow: Olymp-Business, 2018. - 613 p. : tab., schemes. — Access Mode: — URL:<http://biblioclub.ru/index.php?page=book&id=494449>— Text : electronic.

2. Lich, L. On time and within the budget: project management according to the critical chain method / L. Lich; scientific ed. O. Zupnik; per. U. Salamatova. - 3rd ed. - Moscow: Alpina Publisher, 2016. - 352 p. : schemes. — Access mode: — URL:<http://biblioclub.ru/index.php?page=book&id=471708>— ISBN 978-5-9614-5004-0. —

Text : electronic.

3. Project management using Microsoft Project / T.S. Vasyuchkova, N.A. Ivancheva, M.A. Derzho, T.P. Pukhnachev. - 2nd ed., Rev. - Moscow: National Open University "INTUIT", 2016. - 148 p. : ill. - Access Mode: - URL:<http://biblioclub.ru/index.php?page=book&id=429881>. - Bibliography. in book. - Text : electronic.

c) software and Internet resources:

Office applications, Microsoft Office 2013 (or lower) -Microsoft Open License - License No. 61984042 Agreement No. 08-05/13 dated 06/03/2013 Transfer and Acceptance Certificate No. 961, Transfer and Acceptance Certificate No. 385

Operating system, Windows 7 (or lower) - Microsoft Open License - License No. 61984214, 61984216, 61984217, 61984219, 61984213, 61984218, 61984215; Agreement No. 08-05/13 dated 06/03/2013 Transfer and Acceptance Certificate No. 961

- <http://www.gov.ru> Server of state authorities of the Russian Federation.
- <http://www.mos.ru> Official server of the Government of Moscow.
- <http://www.garant.ru> GUARANTOR Legislation with comments.
- <http://www.gks.ru> Federal State Statistics Service.
- <http://www.rg.ru> Russian newspaper.
- <http://www.rbc.ru> RBC (RosBusinessConsulting).
- <http://www.businesspress.ru> Business press.
- <http://uisrussia.msu.ru> University Information System of Russia.
- <http://www.mevriz.ru> Journal "Management in Russia and abroad"
- <http://minpromtorg.gov.ru> Ministry of Industry and Trade of the Russian

Federation.

8. Logistics support of discipline.

Audience for lectures and seminars Departments of Management. Training tables with benches, classroom board, portable multimedia complex (projector, projection screen, laptop). Teacher's workplace: table, chair.

Office applications, Microsoft Office 2013 (or lower) -Microsoft Open License - License No. 61984042 Agreement No. 08-05/13 dated 06/03/2013 Transfer and Acceptance Certificate No. 961, Transfer and Acceptance Certificate No. 385

Operating system, Windows 7 (or lower) - Microsoft Open License - License No. 61984214, 61984216, 61984217, 61984219, 61984213, 61984218, 61984215; Agreement No. 08-05/13 dated 06/03/2013 Transfer and Acceptance Certificate No. 961

9. Guidelines for students when working on lecture notes during the lecture.

Lecture - a systematic, consistent, monologue presentation by the teacher of educational material, as a rule, of a theoretical nature. When preparing a lecture, the teacher is guided by the working program of the discipline. In the course of lectures, it is recommended to keep a summary, which will later allow you to recall the studied educational material, to supplement the content during independent work with literature.

You should also pay attention to categories, formulations that reveal the content of certain phenomena and processes, scientific conclusions and practical recommendations, positive experience in oratory. It is advisable to leave fields in the working notes on which to make notes from the recommended literature, supplementing the material of the lecture heard, as well as emphasizing the particular importance of certain theoretical positions.

Lecture conclusions summarize the teacher's reflections on educational issues. The teacher provides a list of used and recommended sources for studying a particular topic. At the end of the lecture, students have the opportunity to ask questions to the teacher on the topic of the lecture. When lecturing on the discipline, electronic multimedia presentations can be used.

Guidelines for students when working at the seminar

Seminars are implemented in accordance with the working curriculum with consistent study of the topics of the discipline. In preparation for the seminars, the student is recommended to study the basic literature, get acquainted with additional literature, new publications in periodicals: magazines, newspapers, etc. In this case, the recommendations

of the teacher and the requirements of the curriculum should be taken into account. It is also recommended to refine your lecture notes by making appropriate entries in it from the literature recommended by the teacher and provided by the curriculum. Abstracts should be prepared for presentations on all educational issues submitted to the seminar. Since the student's activity in seminars is the subject of monitoring his progress in mastering the course, preparation for seminars requires a responsible attitude.

Guidelines for students on the organization of independent work

Independent work of students is aimed at independent study of a separate topic of the academic discipline. Independent work is mandatory for each student, its volume is determined by the curriculum. During independent work, the student interacts with the recommended materials with the participation of the teacher in the form of consultations. The electronic library system (electronic library) of the university provides the possibility of individual access for each student from any point where there is access to the Internet.

10. Guidelines for the teacher (Guidelines for making presentations)

A presentation (from the English word - presentation) is a set of color slide pictures on a specific topic, which is stored in a special format file with the PP extension. The term "presentation" (sometimes called "slide film") is associated primarily with the information and advertising functions of pictures that are designed for a certain category of viewers (users).

Multimedia computer presentation is:

- dynamic synthesis of text, image, sound;
- the most modern software interface technologies;
- interactive contact of the speaker with the demonstration material;
- mobility and compactness of information carriers and equipment;

- ability to update, supplement and adapt information;
- low cost.

Rules for the design of computer presentations

General Design Rules

Many designers argue that there are no laws and rules in design. There are tips, tricks, tips. Design, like any kind of creativity, art, like any way of some people to communicate with others, like language, like thought, will bypass any rules and laws. However, there are certain recommendations that should be followed, at least for novice designers, until they feel the strength and confidence to create their own rules and recommendations.

Font design rules:

- Serif fonts are easier to read than sans-serif fonts;
- Capital letters are not recommended for body text.
- Font contrast can be created through: font size, font weight, style, shape, direction, and color.
- Rules for choosing colors.
- The color scheme should consist of no more than two or three colors.
- There are incompatible color combinations.
- Black color has a negative (gloomy) connotation.
- White text on a black background is hard to read (inversion is hard to read).

Presentation design guidelines

In order for the presentation to be well perceived by the audience and not cause negative emotions (subconscious or completely conscious), it is necessary to follow the rules for its design.

The presentation involves a combination of information of various types: text, graphics, musical and sound effects, animation and video clips. Therefore, it is necessary to take into account the specifics of combining fragments of information of various types. In addition, the design and demonstration of each of the listed types of information is also

subject to certain rules. So, for example, for textual information, the choice of font is important, for graphic information - brightness and color saturation, for their best joint perception, optimal relative position on the slide is necessary.

Consider recommendations for the design and presentation of various types of materials on the screen.

Formatting text information:

- font size: 24-54 pt (headline), 18-36 pt (plain text);
- font color and background color should contrast (the text should be well read), but not hurt the eyes;
- font type: smooth sans-serif font for body text (Arial, Tahoma, Verdana), decorative font can be used for heading if it is legible;
- italics, underlining, bold, capital letters are recommended to be used only for semantic highlighting of a text fragment.

Formatting graphic information:

- drawings, photographs, diagrams are designed to supplement textual information or convey it in a more visual form;
- it is desirable to avoid drawings in the presentation that do not carry a semantic load if they are not part of the style design;
- the color of graphic images should not contrast sharply with the overall style of the slide;
- illustrations are recommended to be accompanied by explanatory text;
- if a graphic image is used as a background, then the text on this background should be well readable.

The content and location of information blocks on the slide:

- there should not be too many information blocks (3-6);
- the recommended size of one information block is no more than 1/2 of the slide size;

- it is desirable to have on the page blocks with different types of information (text, graphs, diagrams, tables, figures) that complement each other;
- keywords in the information block must be highlighted;
- information blocks should be placed horizontally, blocks related in meaning - from left to right;
- the most important information should be placed in the center of the slide;
- the logic of presenting information on slides and in the presentation should correspond to the logic of its presentation.

In addition to the correct arrangement of text blocks, one must not forget about their content - the text. In no case should it contain spelling errors. You should also take into account the general rules for formatting the text.

After creating a presentation and its design, you need to rehearse its presentation and your performance, check how the presentation will look like as a whole (on a computer screen or projection screen), how quickly and adequately it is perceived from different audience locations, under different lighting conditions, noise accompaniment, in an environment as close as possible to the real conditions of the performance.

The work program was compiled on the basis of the Federal State Educational Standard of Higher Education in the direction of training bachelors on March 38, 02 "Management", approved by order of the Ministry of Education and Science of the Russian Federation of August 12, 2020 No. 970 (Registered in the Ministry of Justice of Russia on August 25, 2020 No. 59449).

The program was made by:

Head of the CPD /I. Petukhov/

The program was approved at a meeting of the Center for Project Activities

"" August, protocol No.

Head of the CPD / I. Petukhov /

7.1	Project work	7			eighteen		66								
	<i>Appraisal Form</i>								one		one	one			Z
	Total hours per discipline in the 7th semester				eighteen		66								
	Total hours per discipline				108		396								

**MINISTRY OF SCIENCE AND HIGHER EDUCATION
RUSSIAN FEDERATION**

Federal State Autonomous Educational Institution
higher education

"MOSCOW POLYTECHNICAL UNIVERSITY"
/ MOSCOW POLYTECH /

Direction of training: 38.03.02 "Management"

EP (Educational Programme): Business Process Management

Type of professional activity: organizational and managerial, information and
analytical, entrepreneurial

Form of study: full-time, part-time

Project Activity Center

VALUATION FUND

BY DISCIPLINE PROJECT ACTIVITY

Composition: 1. Passport of the fund of appraisal funds

2. Description of evaluation tools:

topics of the round table, business games, creative tasks, questions for the test

Compiled by:

Petukhov I.A.

Moscow, 2022

Table 1

INDICATOR OF THE LEVEL OF FORMATION OF COMPETENCES

Project activity					
GEF VO 38.03.02 "Management"					
In the process of mastering this discipline, the student forms and demonstrates the following competencies:					
COMPETENCES		List of components	Competence formation technology	Assessment Tool Form**	Degrees of levels of development of competencies
INDEX	FORMULATION				
UK-2	Able 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 available resources and restrictions	know: - project features; - basics of project management; - areas of application of modern approaches to project activities and project management in the field of management on examples from real practice be able to: - carry out the formation and management of projects; - apply modern approaches to project activities and project management in the field of management using examples from real practice - coordinate the activities of performers own: - skills of step-by-step control over the implementation of business plans - skills in solving tasks and analyzing their results.	independent work, seminars	TZ, DS, KS, offset	A basic level of: formed the ability to work within the framework of the project together with other participants at all stages of its life cycle, taking into account the direction of the student's professional activity. Advanced level: athasty and systematic application of the skills of organizing and implementing projects to the specified requirements and on time.

** - For abbreviations of forms of evaluation tools, see Appendix 2 to the RP.

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
one	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	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
four	credit	Form of knowledge assessment. In higher education institutions are held during the session.	Questions for the test

Approximate tasks for the development of business games in the discipline "Project activity» (formation of competences UK-2)

Approximate tasks for the business game Engineering Start

1. autonomous vehicle
2. Air flow meter
3. Low temperature boiling device
4. Wind power generator
5. water gun

Approximate tasks for a business game Project start

1. Development of a PR campaign for an educational program
2. Development of an entrepreneurial initiative

Criteria for evaluating participation in a business game

The system for evaluating gaming activity is built on the basis of assessing the quality and effectiveness of the decisions made, their reasoning.

For participation in a business game, students are awarded points in accordance with the criteria presented in the table.

Evaluation criterion	score
1. Theoretical level of knowledge	0-5
2. Quantity and quality of ideas put forward	0-10
3. Argumentation of put forward ideas	0-10
4. The ability to listen to opponents and lead a discussion	0-5
5. Oratory	0-3
6. Reinforcing materials with factual data (statistical data, etc.)	0-5
7. Ability to defend one's own point of view	0-5
8. Quality of answers to questions	0-5
9. Ability to work in a team	0-5
10. Degree of participation in the general discussion	0-10
<i>Total points:</i>	0-63

Evaluation of participation in the business game:

excellent - 54-63 points;

good - 44-53 points;

satisfactory - 30-63 points;

unsatisfactory - less than 30 points.

**List of topics for a round table / discussion on the discipline "Project activity»
to assess the development of the disciplinary parts of the competence of UK-2**

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.

Scale and criteria for evaluating participation in the round table

The degree of development	of	Criteria for assessing the level of mastery of competencies
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competence	
Enhanced 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
A basic level of	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
Baseline 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

Topics of general group creative tasks in the discipline "Project activity» to assess the development of competence UK-2

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.

Preparing and conducting presentations for customer representatives.

Scale and criteria for evaluating a creative task

The degree of development competence	Criteria for assessing the level of mastery of competencies
Enhanced level	the student successfully plans and organizes teamwork together with other participants in the course of solving creative tasks, is able to solve complex problems in non-standard situations in a team
A basic level of	the student actively cooperates within the team and is a useful participant in the implementation of tasks in the course of solving
Baseline not reached	assigned to a student if he is not included in the team work on the implementation of tasks

An indicative list of questions for the test in the discipline "Project activity" formation of the competence of UK-2

1. Basic concepts of the project.
2. Distinctive features of the project.
3. Classification of projects.

4. The concept of an investment construction project, the relationship between project portfolios and programs.
5. The content of the investment construction project.
6. Economic approach to the concept of the life cycle of a real estate object.
7. The relationship between the life cycles of objects and projects.
8. Project environment, structural diagram of the project environment.
9. Participants of the investment construction project. The main participants of the project.
10. Structural decomposition (tree) of the EPS project.
11. WBS work breakdown structure.
12. Participants of the investment project. Possible participants of the project.
13. Definition of project management.
14. Signs, participants, stages of the project.
15. Goal setting in the project. SMART principles.
16. Establishing the scope of the project.
17. Sources of project financing.
18. Procedures and stages of obtaining investments.
19. Classification of investors. Venture investments.
20. State investments, business support programs.
21. responsibility matrix. Team development stages. Team management principles.
22. Determining the cost structure of the project.
23. Conditionally variable and conditionally fixed costs.
24. Determination of the tax base and taxation system.

25. Simplified tax system.
26. Investment costs.
27. Income, marginal and operating profit. Definition of cash flow.
28. Graph and break-even point, simple payback period.
29. Discounting and the time value of money.
30. Determination of the discount rate.
31. Financial and economic indicators of the project: net present value, discounted payback period
32. Financial and economic indicators of the project: profitability index, internal rate of return
33. Determining the competitiveness of a product. Competitive advantages.
34. Ways to describe competitive advantages.
35. Innovation as a commodity.
36. Definition and analysis of sales markets. Chain of stakeholders.
37. Ways to bring products to market. Ways and channels of distribution.
38. Marketing of new products.
39. Structural decomposition of works. Operating schedule.
40. Types of risks in projects. Market, financial and country risks.
41. Risks in innovative projects: scientific, technical, patent. Patent protection.
42. Forecasting and planning risks.
43. Estimation of probability of occurrence of risk, assessment of risk impact.
44. Project sensitivity analysis.
45. Project control procedures.

46. Audit of the quality of work. Evaluation of quality indicators. Document control.
47. Project completion procedures.
48. Audit of the key results of the project.
49. Goals and objectives of the investment construction project.
50. What is meant by the result of the project, the strategy of the project and the criterion for the success of the project?
51. Project initiation.
52. Project selection methods.
53. What materials are the result of initiation.
54. Project life cycle.
55. Main managed parameters of the project.
56. Interrelation of various spheres of administrative activity.
57. System model of project management.
58. Stages (groups) of project management processes.
59. The main (basic) functional areas of project management.
60. Auxiliary functional areas of project management.
61. Models of structuring an investment construction project.
62. Project structuring methods.