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"Moscow Polytechnic University"

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WORKING PROGRAM OF THE DISCIPLINE

"Business Process Management Tools"

Field of study
38.03.02 Management

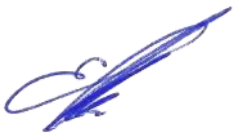
Educational program (profile)
"Business Process Management"

Qualification (degree)
Bachelor

Form of study
Part-time

Moscow 2025

Developer(s):
Sen. Lecturer at the Department of Management  /V.V.Mazur /

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1. Goals, objectives and planned learning outcomes in the discipline

Purpose of the discipline "Business process management tools": developing in students a holistic systemic understanding of the essence of various organizational management tools, models for managing organizational development, as well as skills in the field of assessing the effectiveness of organizational management.

Objectives of the discipline:

- provide knowledge of the basic tools of organization management;
- teach how to apply business process management tools in practice;-analyze the productivity and efficiency of the organization's management.

Training in the discipline "Business Process Management Tools" is aimed at developing the following competencies in students:

Code and name of competencies	Indicators of Competency Achievement
PK-2 Capable of designing and implementing cross-functional organizational processes	**IPK-2.1.**Knows methods of designing functional role models; methods of structural decomposition of cross-functional processes and administrative regulations; principles and methods for measuring and analyzing performance indicators of cross-functional processes and administrative regulations; principles and methods of translating the organization's goals into indicators of cross-functional processes and administrative regulations; methods and techniques for process optimization; principles and rules for working with documents and normative and methodological documentation; specialized software for process management; basics of operational management; fundamentals of economics, cost accounting and performance assessment; process management theory; principles of integration of corporate information systems; basics of project management; principles and methods of change management; methods of making management decisions.
	IPK-2.2. Able to aggregate, structure and summarize information; develop local regulations in the field of managing cross-functional processes; use specialized software to manage processes; monitor the compliance of developed documents with regulatory and methodological documentation; measure the effectiveness of a cross-functional process or administrative regulation; identify potential for improving the efficiency of a cross-functional process or administrative regulation; formulate and justify proposals to improve the efficiency of cross-functional processes or administrative regulations; communicate, hold working meetings, find consensus; evaluate the resources needed to improve a cross-functional process or administrative procedure; assess the risks of the chosen solutions; develop requirements for integration with corporate information systems; prepare and conduct presentations; develop and present action plans, evaluate the achievement of results, develop corrective measures to achieve plans.
	IPK-2.3. Possesses the skills of systematizing the collected information about the cross-functional process of the

	organization or the administrative regulations of the organization; documenting the cross-functional process of the organization or developing administrative regulations of the organization in accordance with the requirements of regulatory and methodological documentation; development of an executable cross-functional process of an organization or administrative regulations of an organization using specialized software for process management; development of control points that allow assessing the degree of compliance with regulations, and methods for measuring performance indicators of an organization's cross-functional process or an organization's administrative regulations; developing proposals to improve the efficiency of the organization's cross-functional process or the organization's administrative regulations; registration of the results of development or refinement of the cross-functional process of the organization or the administrative regulations of the organization; planning the implementation of a cross-functional process of the organization or the administrative regulations of the organization or its improvement; implementation of a cross-functional process of the organization or administrative regulations of the organization or its improvement; assessing the effectiveness of implementing a cross-functional process of an organization or an administrative regulation of an organization or improving it; instructing personnel on the implemented or improved cross-functional process of the organization or the administrative regulations of the organization.

List of planned learning outcomes for the discipline (module), correlated with the planned mastery results

As a result of mastering the discipline (module), students develop the following competencies and the following learning outcomes must be achieved as a stage in the formation of relevant competencies:

Code and name of competencies	Indicators of Competency Achievement	List of planned learning outcomes in the discipline
PC-2 Able to design and implement cross-functional organizational processes	**IPK-2.1.**Knows methods of designing functional role models; methods of structural decomposition of cross-functional processes and administrative regulations; principles and methods for measuring and analyzing performance indicators of cross-functional processes and administrative regulations; principles and methods of translating the organization's goals into indicators of cross-functional processes and administrative regulations; methods and techniques for process optimization; principles and rules for working with documents and normative and methodological documentation; specialized software for process management; basics of operational management; fundamentals of economics, cost accounting and performance assessment; process management theory; principles of integration of corporate information systems; basics of project management; principles and methods of change management; methods of making management decisions.	**Know:** about the basic principles functioning of the organization; **Be able to:** identify new market opportunities opportunities and implement the formation of new business models; **Possess:** skills to use basic principles of the organization's functioning.

	IPK-2.2. Able to aggregate, structure and summarize information; develop local regulations in the field of managing cross-functional processes; use specialized software to manage processes; monitor the compliance of developed documents with regulatory and methodological documentation; measure the effectiveness of a cross-functional process or administrative regulation; identify potential for improving the efficiency of a cross-functional process or administrative regulation; formulate and justify proposals to improve the efficiency of cross-functional processes or administrative regulations; communicate, hold working meetings, find consensus; evaluate the resources needed to improve a cross-functional process or administrative procedure; assess the risks of the chosen solutions; develop requirements for integration with corporate information systems; prepare and conduct presentations; develop and present action plans, evaluate the achievement of results, develop corrective measures to achieve plans; lead change implementation projects; plan and conduct staff training; evaluate the actual effectiveness of an implementation or improvement project.	**Know:** about the main Instruments organization management; **Be able to:** apply methods for developing new species products; **Own:** skills identifying new market opportunities and formation new business models.
	IPK-2.3. Possesses the skills of systematizing the collected information about the cross-functional process of the organization or the administrative regulations of the organization; documenting the cross-functional process of the organization or developing administrative regulations of the organization in accordance with the requirements of regulatory and methodological documentation; development of an executable cross-functional process of an organization or administrative regulations of an organization using specialized software for process management; development of control points that allow assessing the degree of compliance with regulations, and methods for measuring performance indicators of an organization's cross-functional process or an organization's administrative regulations; developing proposals to improve the efficiency of the organization's cross-functional process or the organization's administrative regulations; registration of the results of development or refinement of the cross-functional process of the organization or the administrative regulations of the organization; planning the implementation of a cross-functional process of the organization or the administrative regulations of the organization or its improvement; implementation of a cross-functional process of the organization or administrative regulations of the organization or its improvement; assessing the effectiveness of implementing a cross-functional process of an organization or an administrative regulation of an organization or improving it; instructing personnel on the implemented or improved cross-functional process of the organization or the administrative regulations of the organization.	**Know:** basic methods for assessing the efficiency of resource use organizations; **Be able to:** collect, processing and analysis of information about the competitive environment; **Own:** application skills collecting, processing and analyzing information about the competitive environment.

2. Place of discipline in the structure of the educational program

The discipline “Business Process Management Tools” refers to the part formed by participants in educational relations in block B1 “Disciplines (modules)” (B.1.2.17).

The discipline “Business Process Management Tools” is logically, substantively and methodologically interconnected with the following EP disciplines:

- “Management and assessment of the effectiveness of business processes”;
- "Process Management".

3. Structure and content of the discipline

The total labor intensity of the discipline is 5 credit units (180 hours).

3.1 Types of educational work and labor intensity

(according to forms of study)

3.1.1. Part-time education

No. p/p	Type of educational work	Number of hours	Semesters	
			8	-
1	**Auditory lessons**	**36**	**36**	-
	Including:			-
1.1	Lectures	18	18	-
1.2	Seminars/practical sessions	18	18	-
1.3	Laboratory exercises	-	-	-
2	**Independent work**	**144**	**144**	-
3	**Interim certification**	**-**	**-**	-
	Test/differential test/exam	**exam**	**exam**	-
	Total	**180**	**180**	-

3.2 Thematic plan for studying the discipline

(according to forms of study)

3.2.2. Part-time education

	Sections/topics of the discipline	Labor intensity, hour					
		Total	Classroom work				Independently work
			Lecture	Seminars / practical classes	Laboratory classes	Practical Preparation	
1.	**Topic 1. Modern approaches to organization management**	20	2	2			16

2.	**Topic 2. Fundamentals of the process approach and business processes**	20	2	2			16
3.	**Topic 3. Management of business processes in an organization**	20	2	2			16
4.	**Topic 4. Building a system of organizational processes.**	20	2	2			16
5.	**Topic 5. Regulation of processes**	20	2	2			16
6.	**Topic 6. Information technologies for supporting business processes**	20	2	2			16
7.	**Topic 7. System of indicators for process management**	20	2	2			16
8.	**Topic 8. Business process monitoring**	20	2	2			16
9.	**Topic 9. Process management**	20	2	2			16
	Total	180	18	18			144

3.3 Contents of the discipline

Topic 1. Modern approaches to organization management

Modern approaches to organization management: the evolution of the development of management thought. School of Scientific Management. School of Administration. School of Human Relations.

Topic 2. Fundamentals of the process approach and business processes

Fundamentals of the process approach and business processes. Key management principles that form the process approach. Comparison of the functional and process approach. Changes in management caused by the development of the process approach. Basic principles of the process approach. Main characteristics of the process. Business process model.

Topic 3. Management of business processes in an organization

Modern classification of business processes. Basic processes. Related processes. Auxiliary processes. Supporting processes. Management processes and development processes.

Topic 4. Building a system of organizational processes.

Business modeling and directions of its activities. Model "5 R's of Operations Management". Goals of business process development. Responsibilities of business process managers.

Topic 5. Regulation of processes

Regulation of business processes. Business process regulations. Stages of development and approval of business process regulations. Requirements for the content of the regulations. Regulations passport. General provisions. General description of the process. Detailed description of the process. Process implementation efficiency indicators. Document form templates.

Topic 6. Information technologies for supporting business processes

Digital information technologies for automating business processes and business systems. Communications as an integral part of business processes. Information and analytical system and its components. Data collection and storage subsystems. Subsystems for accessing data on enterprise activities. OLTP (On-Line Transaction Processing).

Topic 7. System of indicators for process management

System of indicators for process management. Criteria for determining priority business processes. Assessing the importance of business processes. Approaches to comparing business processes. Matrix for comparing the organization's business processes and critical success factors. Business process ranking matrix. Balanced Scorecard Organization Strategic Map.Key Performance Indicators (KPI).

Topic 8. Business process monitoring

Business process monitoring. Black box model. Monitoring as a tool of strategic management. The main tasks of monitoring business processes. Monitoring as a system for collecting, processing and storing information. Monitoring principles.

Topic 9. Process management

Requirements for building business processes. Business process integration. Horizontal compression of business processes. Decentralization of responsibility. Logic of business process implementation. Diversification of business processes. Development of different versions of business processes. Rationalization of horizontal connections. Rationalization of managerial influence. Mechanical and organic forms of hierarchy.

3.4 Topics of seminars/practical and laboratory classes

3.4.1. Seminars/practical sessions

Topic 1. Modern approaches to organization management
Topic 2. Fundamentals of the process approach and business processes
Topic 3. Management of business processes in an organization
Topic 4. Building a system of organizational processes.
Topic 5. Regulation of processes
Topic 6. Information technologies for supporting business processes
Topic 7. System of indicators for process management
Topic 8. Business process monitoring
Topic 9. Process management

4. Educational, methodological and information support

4.1 Main literature

1. Dolganova, O. I. Modeling business processes: textbook and workshop for universities / O. I. Dolganova, E. V. Vinogradova, A. M. Lobanova; edited by O. I. Dolganova. — 2nd ed., revised. and additional - Moscow: Yurayt Publishing House, 2024. - 322 p. - (Higher education). — ISBN 978-5-534-17914-9. — Text: electronic // Educational platform Urayt [website]. — URL:https://urait.ru/bcode/536465

2. Kamennova, M. S. Modeling business processes: textbook and workshop for universities / M. S. Kamennova, V. V. Krokhin, I. V. Mashkov. - Moscow: Yurayt Publishing House, 2024. - 534 p. - (Higher education). — ISBN 978-5-534-16695-8. — Text: electronic // Educational platform Urayt [website]. — URL:https://urait.ru/bcode/544948

4.2 Additional literature

1. Odintsov, B. E. Cognitive systems for managing business performance: textbook and workshop for universities / B. E. Odintsov. — 2nd ed., revised. and additional - Moscow: Yurayt Publishing House, 2024. - 311 p. - (Higher education). — ISBN 978-5-534-16201-1. — Text: electronic // Educational platform Urayt [website]. — URL:https://urait.ru/bcode/530606

2. Frolov, Yu. V. Strategic management. Formation of strategy and design of business processes: textbook for universities / Yu. V. Frolov, R. V. Seryshev; edited by Yu. V. Frolov. — 2nd ed., rev. and additional - Moscow: Yurayt Publishing House, 2024. - 154 p. - (Higher education). — ISBN 978-5-534-09015-4. — Text: electronic // Educational platform Urayt [website]. — URL:https://urait.ru/bcode/538640

4.3 Electronic educational resources

An electronic educational resource on the discipline is under development.

4.4 Licensed and freely distributed software.

Office applications, Microsoft Office 2013 (or lower) – Microsoft Open License. License No. 61984042

4.5 Modern professional databases and information help systems

1. http://www.gov.ru Server of government authorities of the Russian Federation.
2. http://www.mos.ru Official server of the Moscow Government.
3. http://www.minfin.ru Ministry of Finance of the Russian Federation.
4. http://www.garant.ru GARANT Legislation with comments.
5. http://www.gks.ru Federal State Statistics Service.
6. http://www.rg.ru Russian newspaper.
7. http://www.prime-tass.ru PRIME-TASS Economic Information Agency.
8. http://www.rbc.ru RBC (RosBusinessConsulting).
9. http://www.businesspress.ru Business press.
10. http://www.ereport.ru World economy.
11. http://uisrussia.msu.ru University information system of Russia.
12. http://www.forecast.ru TsMAKP (Center for Macroeconomic Analysis and Short-Term Forecasting).
13. http://www.cfin.ru Corporate management.
14. http://www.fin-izdat.ru Publishing house "Finance and Credit" 15. http://economist.com.ru The Economist magazine.
16. http://www.vopreco.ru Journal "Economic Issues".
17. http://www.mevriz.ru Magazine "Management in Russia and Abroad"
18. http://systems-analysis.ru/ Laboratory of Systems Analysis
19. https://gtmarket.ru/concepts/7111 System analysis
20. http://minpromtorg.gov.ru/ Ministry of Industry and Trade of the Russian Federation.

21. http://www.rg.ru Russian newspaper.

5. Logistics support

Auditoriums for lectures and seminars of the general fund: educational tables with benches, a blackboard, a portable multimedia complex (projector, projection screen, laptop). Teacher's workplace: table, chair.

6. Guidelines

6.1 Methodological recommendations for teachers on organizing training

Current control (carried out by the lecturer and teacher): correctness of answers to questions on the topics covered; assessment of existing opinions and approaches to solving specific problems; essay preparation; intermediate testing in individual sections of the discipline.

1. When performing routine monitoring, it is possible to use test material. Samples of control questions and tasks for conducting ongoing monitoring are given in the appendix. When implementing a bachelor's degree program, an organization has the right to use e-learning and distance learning technologies. All materials are posted in the Moscow Polytechnic Library.
2. When training people with disabilities, e-learning and distance educational technologies must provide for the possibility of receiving and transmitting information in forms accessible to them.

6.2 Guidelines for students on mastering the discipline

A lecture is a systematic, consistent, monologue presentation by a teacher of educational material, usually of a theoretical nature. When preparing a lecture, the teacher is guided by the work program of the discipline. During lectures, it is recommended to take notes, which will allow you to later recall the studied educational material and supplement the content when working independently 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 margins in your working notes in which to make notes from the recommended literature, supplementing the material of the lecture you listened to, as well as emphasizing the special importance of certain theoretical positions.

Conclusions from the lecture summarize the teacher’s thoughts on educational issues. The teacher provides a list of used and recommended sources for studying a specific topic. At the end of the lecture, students have the opportunity to ask questions to the teacher about the topic of the lecture. When delivering lectures on the discipline, electronic multimedia presentations can be used.

Methodological instructions for students when working at the seminar.

Seminars are implemented in accordance with the working curriculum with sequential study of the topics of the discipline. In preparation for the seminars, the student is recommended to study the basic literature, familiarize himself with additional literature, new publications in periodicals: magazines, newspapers, etc. In this case, you should take into account the recommendations of the teacher and the requirements of the curriculum. It is also recommended to finalize your lecture notes by making appropriate notes from the literature recommended by the teacher and provided for by the

curriculum. Abstracts should be prepared for presentations on all educational issues brought up for the seminar.

Since the student's activity in seminar classes is the subject of monitoring his progress in mastering the course, preparation for seminar classes requires a responsible attitude. During interactive classes, students must be active.

Guidelines for students on organizing 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. When working independently, 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.

If there are students with disabilities, they will be provided with printed and (or) electronic educational resources in forms adapted to their health limitations.

Guidelines for making presentations.

A presentation (from the English word - presentation) is a set of color picture slides 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, which 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 between the speaker and the demonstration material;
- mobility and compactness of information media and equipment;□ ability to update, supplement and adapt information;□ low cost.

Rules for designing computer presentations

General Design Rules

Many designers claim that there are no laws or rules in design. There are tips, tricks, tricks. Design, like any kind of creativity, art, like any way of some people communicating with others, like a language, like a thought, will bypass any rules and laws.

However, there are certain guidelines that should be followed, at least for novice designers, until they feel the strength and confidence to create their own rules and guidelines.

Font design rules:

- Serif fonts are easier to read than sans serif fonts;□ It is not recommended to use capital letters 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 received by the audience and not cause negative emotions (subconscious or fully conscious), it is necessary to follow the rules of its design.

A presentation involves a combination of information of various types: text, graphics, music and sound effects, animation and video clips. Therefore, it is necessary to take into account the specifics of combining pieces of information of different types. In addition, the design and display of each of the listed types of information is also subject to certain rules. So, for example, the choice of font is important for textual information, brightness and color saturation are important for graphic information, and optimal relative position on the slide is necessary for the best possible perception of them together.

Let's consider recommendations for the design and presentation of various types of materials on the screen.

Formatting text information:

- font size: 24–54 points (heading), 18–36 points (plain text);
- the font color and the background color should contrast (the text should be easy to read), but not hurt the eyes;
- font type: for the main text a smooth sans-serif font (Arial, Tahoma, Verdana), for the title you can use a decorative font if it is easy to read;
- Italics, underlining, bold font, and capital letters are recommended to be used only for semantic highlighting of a text fragment.

Design of graphic information:

- drawings, photographs, diagrams are designed to supplement textual information or convey it in a more visual form;
- It is advisable to avoid drawings in the presentation that do not carry a semantic load, if they are not part of the style;
- the color of the graphic images should not sharply contrast 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 clearly readable.

Contents and arrangement 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 the size of the slide;
- It is desirable to have blocks with different types of information on the page (text, graphs, diagrams, tables, pictures) that complement each other;
- Key words in the information block must be highlighted;
- It is better to place information blocks 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 a presentation must correspond to the logic of its presentation.

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

After creating a presentation and its design, you need to rehearse its presentation and your speech, check how the presentation as a whole will look (on a computer screen or projection screen),

how quickly and adequately it is perceived from different places in the audience, under different lighting, noise, in an environment as close as possible to real performance conditions.

7. Appraisal Fund

7.1 Methods for monitoring and assessing learning outcomes

INDICATOR OF COMPETENCY DEVELOPMENT LEVEL

Business Process Management Tools						
Federal State Educational Standard of Higher Education 38.03.02 "Management" **OP**"Business Process Management"						
In the process of mastering this discipline, the student develops and demonstrates the following professional competencies:						
COMPETENCIES			**Planned learning outcomes for the discipline**	**Technology for developing competencies**	**Form of assessment tool****	**Degrees of levels of mastering competencies**
INDEX	**FORMULATION**	**Code and name of the competency achievement indicator**				
PK-2	Able to design and implement cross-functional organizational processes	**IPK-2.1.**Knows methods of designing functional role models; methods of structural decomposition of cross-functional processes and administrative regulations; principles and methods of measuring and analyzing performance indicators of cross-functional processes and administrative regulations; principles and methods of translating the organization's goals into indicators of cross-functional processes and administrative regulations; methods and techniques for process optimization; principles and rules for working with documents and normative and methodological documentation; specialized software for process management; basics of operational management; fundamentals of economics, cost accounting and performance assessment; process management theory; principles of integration of corporate information systems; basics of project management; principles and methods of change management; methods of making management decisions.	**Know:** about the basic principles of the organization's functioning; **Be able to:** identify new market opportunities and create new business models; **Possess:** skills in using the basic principles of the organization's functioning.	lecture, independent work, seminar classes	UO, DS, exam	A basic level of - knowledge of basic tools management Advanced level - ability and proficiency in assessing the effectiveness of using management tools

		IPK-2.2. Able to aggregate, structure and summarize information; develop local regulations in the field of cross-functional process management; use specialized software to manage processes; monitor the compliance of developed documents with regulatory and methodological documentation; measure the effectiveness of a cross-functional process or administrative regulation; identify potential for improving the efficiency of a cross-functional process or administrative regulation; formulate and justify proposals to improve the efficiency of cross-functional processes or administrative regulations; communicate, hold working meetings, find consensus; evaluate the resources needed to improve a cross-functional process or administrative procedure; assess the risks of the chosen solutions; develop requirements for integration with corporate information systems; prepare and conduct presentations; develop and present action plans, evaluate the achievement of results, develop corrective measures to achieve plans; lead change implementation projects; plan and conduct staff training; evaluate the actual effectiveness of an implementation or improvement project.	**Know:** about basic tools organization management; **Be able to**: apply methods for developing new types of products; **Possess:** the skills to identify new market opportunities and form new business models.			
		IPK-2.3. Possesses skills systematization of collected information about the cross-functional process of the organization or the administrative regulations of the organization; documenting cross-functional process of the organization or development of administrative regulations of the organization in accordance with the requirements of regulatory and methodological documentation; development of an executable cross-functional process of an organization or administrative regulations of an organization using specialized software for process management; development of control points that allow assessing the degree of compliance with regulations, and methods for measuring performance indicators of an organization's	**Know:** basic methods for assessing the efficiency of using an organization's resources; **Be able to:** collect, process and analyze information about competitive environment; **Own:** skills in using the collection, processing and analysis of information about the			

		cross-functional process or an organization's administrative regulations; developing proposals to improve the efficiency of the organization's cross-functional process or the organization's administrative regulations; registration of the results of development or refinement of the organization's cross-functional process or administrative regulations of the organization; planning the implementation of a cross-functional process of the organization or the administrative regulations of the organization or its improvement; implementation of a cross-functional process of the organization or administrative regulations of the organization or its improvement; assessing the effectiveness of implementing a cross-functional process of an organization or an administrative regulation of an organization or its improvement; instructing personnel on the implemented or improved cross-functional process of the organization or the administrative regulations of the organization.	competitive environment.			

7.2 Scale and criteria for assessing learning outcomes

In the process of mastering the educational program, competencies, including their individual components, are formed step by step as students master disciplines (modules) and practices in accordance with the curriculum and calendar schedule of the educational process.

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

PK-2 Capable design and deploy cross-functional organization processes.

IPK-2.1. Knows methods of designing functional role models; methods of structural decomposition of cross-functional processes and administrative regulations; principles and methods for measuring and analyzing performance indicators of cross-functional processes and administrative regulations; principles and methods of translating the organization's goals into indicators of cross-functional processes and administrative regulations; methods and techniques for process optimization; principles and rules for working with documents and normative and methodological documentation; specialized software for process management; basics of operational management; fundamentals of economics, cost accounting and performance assessment; process management theory; principles of integration of corporate information systems; basics of project management; principles and methods of change management; methods of making management decisions.

Index	Evaluation criteria			
	2	3	4	5
know: about the main principles of the organization's functioning	The student demonstrates a complete lack of knowledge about the basic principles of the organization's functioning.	The student demonstrates an incomplete understanding of the basic principles of the functioning of the organization; the student experiences significant difficulties in operating knowledge when transferring it to new situations.	The student demonstrates gaps in knowledge about the basic principles of the functioning of the organization, but minor errors, inaccuracies, and difficulties in analytical operations are allowed.	The student demonstrates formed systematic ideas about the basic principles of the functioning of the organization and freely operates the acquired knowledge.

be able to: identify new market opportunities possibilities and implement formation of new business-models;	The student has a complete lack of skills to identify new market opportunities and create new business models.	The student has an unsystematic ability to identify new market opportunities and create new business models. Significant mistakes are made, insufficient skills are manifested in a number of ways indicators, the student experiences significant difficulties in operating skills when transferring them to new situations.	The student has certain gaps in the ability to identify new market opportunities and create new business models. The skills have been mastered, but minor errors, inaccuracies, and difficulties in analytical operations, transfer of skills to new, non-standard situations.	The student has developed the ability to identify new market opportunities and create new business models. Fluently operates with acquired skills and applies them in situations of increased complexity.
own: skills in using the basic principles of the organization's functioning.	The student lacks the skills to use the basic principles of the organization's functioning	The student has a generally successful, but unsystematic application of skills in using the basic principles of organizational functioning. Significant mistakes are made and lack of skills is evident in a row indicators, the student experiences significant difficulties in applying skills in new situations.	The student has gaps in the application of skills in using the basic principles of the functioning of the organization. The skills have been mastered, but minor errors, inaccuracies, and difficulties are allowed during analytical operations and transfer of skills to new, non-standard situations.	The student successfully and systematically applies the skills of using the basic principles of the functioning of the organization. Freely applies acquired skills in situations of increased complexity.

PK-2 Capable design and deploy cross functional organization processes.

IPK-2.2. Able to aggregate, structure and summarize information; develop local regulations in the field of managing cross-functional processes; use specialized software to manage processes; monitor the compliance of developed documents with regulatory and methodological documentation; measure the effectiveness of a cross-functional process or administrative regulation; identify potential for improving the efficiency of a cross-functional process or administrative regulation; formulate and justify proposals to improve the efficiency of cross-functional processes or administrative regulations; communicate, hold working meetings, find consensus; evaluate the resources needed to improve a cross-functional process or administrative procedure; assess the risks of the chosen solutions; develop requirements for integration with corporate information systems; prepare and conduct presentations; develop and present action plans, evaluate the achievement of results, develop corrective measures to achieve plans; lead change implementation projects; plan and conduct staff training; evaluate the actual effectiveness of an implementation or improvement project.

Index	**Evaluation criteria**			
	2	**3**	**4**	**5**
know: about basic management tools organizations;	The student demonstrates a complete lack of knowledge about basic management tools organizations;	The student demonstrates an incomplete understanding of the basic tools of organization management; the student experiences significant difficulties in operating knowledge when transferring it to new situations.	The student demonstrates gaps in knowledge about basic management tools of the organization, but minor errors, inaccuracies, and difficulties in analytical operations are allowed.	The student demonstrates formed systematic ideas about the main management tools of the organization x, and freely operates with the acquired knowledge.
be able to: apply methods development new species products;	U the student has a complete lack of skills to apply methods for developing new types of products;	The student has an unsystematic ability to apply methods for developing new types of products. Significant mistakes are made, insufficient skills are manifested, according to a number of indicators, the student experiences significant difficulties in operating skills when transferring them to new situations.	The student has certain gaps in the ability to apply methods for developing new types of products. The skills have been mastered, but minor errors, inaccuracies, and difficulties are allowed during analytical operations and transfer of skills to new, non-standard situations.	The student has developed the ability to apply methods for developing new types of products. Fluently operates with acquired skills, applies them in situations of increased complexity.

Ownskills to identify new market opportunities and formation of new business models.	U student lack of skills to identify new market opportunities and formation of new business models	The student has a generally successful but unsystematic application of identifying new market opportunities and forming new business models. Significant mistakes are made and a lack of skills in a number of indicators, the student experiences significant difficulties in applying skills in new situations.	The student has gaps in applying skills to identify new market opportunities and form new business models. The skills have been mastered, but minor errors, inaccuracies, and difficulties in analytical operations and transfer of skills to new, non-standard situations are allowed.	The student successfully and systematically applies skills to identify new market opportunities and form new business models. Freely applies acquired skills in situations of increased complexity.

PK-2 Capable design and deploy cross-functional organization processes.

IPK-2.3. Possesses the skills of systematizing the collected information about the cross-functional process of the organization or the administrative regulations of the organization; documenting the cross-functional process of the organization or developing administrative regulations of the organization in accordance with the requirements of regulatory and methodological documentation; development of an executable cross-functional process of an organization or administrative regulations of an organization using specialized software for process management; development of control points that allow assessing the degree of compliance with regulations, and methods for measuring performance indicators of an organization's cross-functional process or an organization's administrative regulations; developing proposals to improve the efficiency of the organization's cross-functional process or the organization's administrative regulations; registration of the results of development or refinement of the cross-functional process of the organization or the administrative regulations of the organization; planning the implementation of a cross-functional process of the organization or the administrative regulations of the organization or its improvement; implementation of a cross-functional process of the organization or administrative regulations of the organization or its improvement; assessing the effectiveness of implementing a cross-functional process of an organization or an administrative regulation of an organization or improving it; instructing personnel on the implemented or improved cross-functional process of the organization or the administrative regulations of the organization.

Indicator b	**Evaluation criteria**			
	2	**3**	**4**	**5**

know: basic methods for assessing the efficiency of resource use organizations;	The student demonstrates complete absence knowledge about basic methods for assessing the efficiency of resource use organizations;	The student demonstrates incomplete submissions about the main methods for assessing the effectiveness of use organization resources, the student experiences significant difficulties with operating knowledge when transferring it to new situations.	The student demonstrates gaps in knowledge about the basic methods for assessing the efficiency of using an organization's resources, but minor errors, inaccuracies, and difficulties in analytical operations are allowed.	The student demonstrates formed systematic representation about the main methods for assessing the efficiency of using an organization's resources; operates freely with acquired knowledge.
Be able to collect, process and analyze information about competitive environment;	The teacher has a complete lack of skills to collect, process and analyze information about competitive environment;	The teacher has unsystematic skills to collect, process and analyze information about the competitive environment. Significant mistakes are made, insufficient skills are manifested, according to a number of indicators, the student experiences significant difficulties in operating skills when transferring them to new situations.	The teacher has certain gaps in the ability to collect, process and analyze information about the competitive environment. The skills have been mastered, but minor errors, inaccuracies, and difficulties are allowed during analytical operations and transfer of skills to new, non-standard situations.	The teacher has developed the ability to collect, process and analyze information about the competitive environment. Fluently operates with acquired skills, applies them in situations of increased complexity.
Own skills in applying collection, processing and analysis information about the competitive environment	The teacher lacks the skills to use the collection, processing and analysis of information about the competitive environment.	The student has a generally successful, but unsystematic application of skills in collecting, processing and analyzing information about the competitive environment. Significant mistakes are made, insufficient proficiency in a number of skills is manifested indicators, The learner experiences significant difficulty applying skills in new situations.	The teacher has gaps in the application of skills in collecting, processing and analyzing information about the competitive environment. The skills have been mastered, but minor errors, inaccuracies, and difficulties are allowed during analytical operations and transfer of skills to new, non-standard situations.	The teacher has successfully and systematically applied the skills of collecting, processing and analyzing information about the competitive environment. Freely applies acquired skills in situations of increased complexity.

Form of intermediate certification: exam.

The final certification of students in the form of an exam is carried out based on the results of completing all types of academic work provided for by the curriculum for a given discipline (module),

while taking into account the results of ongoing monitoring of progress during the semester. Assessment of the degree to which students have achieved the planned learning outcomes in the discipline (module) is carried out by the teacher leading classes in the discipline (module) using the method of expert assessment. Based on the results of the intermediate certification for the discipline (module), a grade is given: “excellent”, “good”, “satisfactory” or “unsatisfactory”.

Only students who have completed independent work in the form of a scientific report and are actively participating in a business game in the discipline “Business Process Management Tools” are allowed to take part in the intermediate certification.

Grading scale	**Description**
Great	Completed independent work, passed test tasks, actively participated in a business game, and performed other types of work provided for by the curriculum. The student demonstrates compliance with the knowledge, skills and abilities given in the tables of indicators, operates with acquired knowledge, skills and abilities, and applies them in situations of increased complexity. In this case, minor errors, inaccuracies, and difficulties during analytical operations and the transfer of knowledge and skills to new, non-standard situations may be made.
Fine	Completed independent work, passed test tasks, actively participated in a business game, and performed other types of work provided for by the curriculum. The student demonstrates incomplete, correct correspondence of knowledge, abilities, skills given in tables of indicators, or if 2-3 minor errors were made.
Satisfactorily	Completed independent work, passed test tasks, participated in a business game, and performed other types of work provided for by the curriculum. The student demonstrates the consistency of knowledge, which covers the main, most important part of the material, but at the same time one significant error or inaccuracy was made.
Unsatisfactory	Completed independent work in the form of a scientific report, did not fully participate in classroom work provided for by the curriculum. The student demonstrates incomplete compliance of knowledge, abilities, skills with those given in the tables of indicators, significant mistakes are made, a lack of knowledge, abilities, skills is manifested in a number of indicators, the student experiences significant difficulties in operating knowledge and skills.

7.3. Discipline assessment tools "Business Process Management Tools"

No. OS	Name of the assessment tool	Brief description of the evaluation tool	Submission of the assessment tool to the Federal Fund

1	Oral survey, interview, (UO)	A means of control, organized as a special conversation between a teacher and a student on topics related to the discipline being studied, and designed to determine the amount of knowledge of the student in a certain section, topic, problem, etc.	Questions on topics/sections of the discipline
2	Report, message (DS)	Product independent work student, who is public performance by presenting the results obtained in solving a specific educational, practical, educational, research or scientific topic	Topics of reports, messages
4	Exam	Final form of knowledge assessment. In higher education institutions they are held during examination sessions.	Questions for the exam

7.3.1. Current control

List of questions tooral survey/interview in the discipline

“Business Process Management Tools” (formation of PC-2 competence)

1. Situational approach to management.
2. Systematic approach to management.
3. Types of planning, the essence of strategic planning
4. Mission concept. Essence and purpose
5. Goals and objectives of the organization. "Tree of Goals"
6. External environment of the organization: characteristics, influence.
7. Analysis of the organization’s external environment: factors of indirect impact (PEST analysis)
8. Analysis of the organization’s external environment: direct impact factors

(competitive analysis)

9. Analysis of the internal environment of the organization.
10. Identification of the organization’s strengths and weaknesses, threats and opportunities (SWOT analysis, SNW analysis)
11. Strategic positioning of the company relative to product life cycles (Arthur Little matrix). Strengths and weaknesses of the matrix Arthur Little.

12. Strategic positioning of the company relative to the life cycles of industries (Hofer-Schendel matrix). Strengths and weaknesses of the Hofer-Shandel matrix.

13. Strategic analysis of the prospects for the company's market position using the BCG matrix.

14. Strategic analysis of the company's market position prospects using McKinsey matrices.

15. Portfolio matrix of Shell's directional policy and its main strategic alternatives.

16. Corporate (basic) strategies of the company.

17. Competitive (business) strategies of the organization.

18. Role-based (innovation-behavioral) strategies of the company.

19. Production functional strategies of the company.

20. The role and functions of decisions in the management process.

21. Typology and classification of management decisions.

22. Situational and behavioral factors influencing the development of management decisions.

23. Information support of solutions and information security.

24. Information support for the director's decisions.

25. The influence of traditions and specifics of the enterprise on the development of management decisions.

26. The role of the human factor in the process of developing a management decision.

27. Risk as an inevitable factor of entrepreneurial activity

28. Risk as a probabilistic category

29. The essence of risk and its main features

30. Risk inconsistency and its manifestation

31. Risk alternative and its essence

32. Uncertainty as a specific feature of risk

33. Main sources of threats and their classification

34. Objective risk factors and their classification

35. Subjective risk factors and their classification

36. Concept, types and scope of application of expert methods for obtaining and evaluating marketing information.

37. Focus group as a tool for collecting primary data.

38. Projection methods for collecting primary data.

39. Observation as a tool for collecting primary data.

40. In-depth interviews as a tool for collecting primary data.

41. Survey methods.
42. Procedure and rules for developing questionnaires.
43. Questionnaire. Draft questionnaire. Questionnaire development and testing. Options for wording questions.
44. Questioning as a tool for collecting primary data.
45. Measurement and scaling. Basic types of scales.
46. Basic models of organizational structures.
47. General model of management hierarchy.
48. Statement of the stimulation problem.
49. Features of modeling basic incentive mechanisms.
50. Features of modeling incentive mechanisms in multi-element systems.
51. Classification of problems of managing organizational systems.
52. Explain the connection between the concepts of system, model, goal, criterion, restrictions, optimal solution.
53. Features of choosing solutions under conditions of uncertainty using specific examples.
54. Scope of Foresight (SCOPE).
55. Development of proposals for Foresight research participants.
56. Information support for foresight research.
57. Organizational support for Foresight.
58. Possible roles in the Foresight organization.
59. Purposes of use and tools of the Delphi survey in Foresight programs
60. The need to carry out research on cultural and social aspects using the Delphi method

Criteria for evaluating an oral survey (interview)

An “excellent” grade is given to a student if the student is oriented in the theoretical material; has an idea of the main approaches to the material presented; knows the definitions of the basic theoretical concepts of the topic being presented, is able to apply theoretical information to analyze practical material, generally demonstrates a willingness to apply theoretical knowledge in practical activities and mastery of most indicators of the competencies being formed.

A “good” grade is given to a student if the student is oriented in the theoretical material; has an idea of the basic approaches to the material presented, but finds it difficult to answer some questions; knows the definitions of the basic theoretical concepts of the topic being presented, but does not fully reflect the essence of the problem under consideration, mainly knows how to apply theoretical information to

analyze practical material, mainly demonstrates a willingness to apply theoretical knowledge in practical activities and mastery of most indicators of the competencies being formed.

A “satisfactory” grade is given to a student if they show insufficient knowledge of theoretical material, the basic concepts of the topic being presented, not always with the correct and necessary use of special terms, concepts and categories; the analysis of practical material was unclear.

An “unsatisfactory” grade is given in cases where the conditions for assigning a “satisfactory” grade are not met.

Topics of reports/messages in the discipline “Business Process Management Tools” (formation of PC-2 competence)

1. Time management of modern managers (Time management)
2. Organizational forms of management.
3. Management efficiency.
4. Formal and informal management.
5. Processes of differentiation and integration in the management system.
6. Diversification of production and management development.
7. Management strategy and tactics: social, economic and organizational development.
8. The essence of strategic management
9. The essence of tactical management.
10. The essence of operational management
11. Stimulating demand and promoting goods on the market.
12. Developing the organization's vision and mission
13. Development of a system of strategic goals
14. SMART – the principle when developing goals
15. Methodology of a systems approach in strategic management
16. Basic concepts of strategic management
17. Organization as an object of strategic management
18. External factors of strategic management
19. Analysis of the organization's external environment
20. Analysis of the industry situation
21. Structure and characteristics of the internal environment of the organization
22. Analysis of the internal environment of the organization
23. Environmental analysis as the initial stage of strategic management

24. Structure and characteristics of the organization's external environment

25. The main differences between strategic and operational management

26. Modern trends in the use of information technology in the process of developing management decisions.

27. Software tools for automating elements of creative activity.

28. Technology for developing management decisions.

29. Building the structure of the problem field and structuring the causes.

30. Problems affecting the quality of management decisions.

31. Democratization of management decision development processes.

32. Organization and effectiveness of using expert assessments.

33. Intellectual activity in the development of management decisions.

34. Modern methods for calculating the effectiveness of management decisions.

35. Features of the development of management decisions in small enterprises.

36. Organization of implementation of decisions made.

37. Risk management and its basic principles

38. Basic rules of risk management

39. Informal methods of minimizing risks

40. Modern requirements for risk management

41. Purpose, content, goals and objectives of marketing research

42. Marketing information system

43. Sequence and stages of marketing research

44. Types of Marketing Research

45. Process of collecting marketing information

46. Marketing to assess the effectiveness of using the potential of an enterprise

47. Construction of conceptual models and their formalization.

48. Algorithmization of system models and their machine implementation.

49. Applied models of information management.

50. Setting management tasks in organizational systems.

51. Modeling of resource distribution mechanisms in organizational systems.

52. Modeling of internal price mechanisms in organizational systems.

53. Modeling of expertise mechanisms in organizational systems.

54. Basic model of contract theory.

55. Modeling competitive mechanisms in organizational systems

56. Modeling the mechanisms of information support for organizational processes.

57. Modeling of complex systems.

58. Planning of computational experiments.

59. Scenarios as a mechanism for developing adaptive strategy and adaptive policy

60. The difference between the scenario approach and other Foresight methods

Report evaluation criteria

No.	Criterion	Grade			
		ex.	chorus	satisfaction	unsatisfactory
1	Structure of the report	The report contains semantic parts balanced in volume	The report contains three semantic parts, unbalanced in volume	One of the semantic parts is missing from the report	The report does not show the presence of semantic parts
2	Contents of the report	The content reflects the essence of the problem under consideration and the main results obtained	The content does not fully reflect the essence of the problem under consideration or the main results obtained	The content does not fully reflect the essence of the problem under consideration and the main results obtained	The content does not reflect the essence of the problem under consideration or the main results obtained
3	Mastery of the material	The student has complete command of the material presented, is problem oriented, and answers questions freely	The student knows the material presented, is oriented in the problem, finds it difficult to answer some questions	The student is not fluent enough in the material being presented and is poorly oriented in the problem	The student does not know the material being presented and has poor understanding of the problem
4	Relevant to the topic	The presented material fully corresponds to the stated topic	The material presented contains elements that are not relevant to the topic	The material presented contains a large number of elements that are not related to the topic.	The material presented is slightly relevant to the topic

7.3.2 Intermediate control

Questions for the exam in the discipline "Business Process Management Tools"

Formation of competence PC-2

1. Manager: his place and role in the organization, features of managerial work.
2. Communications in the organization.
3. Self-organization and self-government
4. Concepts of G. Mintzberg and I. Ansoff
5. Concept of strategic groups
6. Structure and basic models of strategy theory
7. Characteristics of the management decision-making process: social conditioning.
8. The concept of "managerial problem", "managerial decision".
9. Main areas of management decision making.
10. Uncertainty: concept and types.
11. Uncertainty and risk.
12. Production risks, their classification and characteristics.
13. Financial risks, their classification and characteristics.
14. Commercial risks, their classification and characteristics.
15. Goals and objectives of market research.
16. The feasibility of conducting marketing research for business development.
17. Stages and sequence of marketing research.
18. Modeling as a method of scientific knowledge.
19. The concept of process, control system, resource.
20. Systematic and process approach to management.
21. Varieties of Foresight. Brief characteristics.
22. Foresight as a basis for studying development prospects
23. Foresight as a basis for making strategic decisions
24. Means and forms of management design tools.
25. Structure of the design process. Stages of management design.
26. Manager: his place and role in the organization, features of managerial work.
27. Communications in the organization.
28. Self-organization and self-government
29. Concepts of G. Mintzberg and I. Ansoff

30. Concept of strategic groups
31. Structure and basic models of strategy theory
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44. The concept of process, control system, resource.
45. Systematic and process approach to management.
46. Varieties of Foresight. Brief characteristics.
47. Foresight as a basis for studying development prospects
48. Foresight as a basis for making strategic decisions
49. Means and forms of management design tools.
50. Structure of the design process. Stages of management design.
51. Communications in management and their role. Types of management information.
52. Internal variables of the organization: goals, objectives, structure, technology, personnel.
53. Delegation of powers and its role in the activities of organizations.
54. Planning as the main function of management: definition, types, stages of the planning process.
55. Managing change in an organization.
56. Control functions.
57. Competitive strategies according to M. Porter
58. Methods and models of strategic diagnostics
59. Basic methods of situational analysis of the internal environment (cost chain analysis; strategic cost analysis; SWOT analysis)
60. Problems of choosing criteria in making managerial decisions.

61. The process of coordination, adoption and approval of management decisions.

62. Comparative characteristics of modern typical management decision-making processes.

63. Criteria for determining optimality under conditions of uncertainty (Laplace criterion, Wald criterion, mathematical expectation criterion).

64. Criteria for determining optimality under conditions of uncertainty (Savage criterion, Hurwitz criterion, mathematical expectation criterion).

65. Risk assessment and selection of management decisions.

66. Quantitative methods for collecting and processing marketing information.

67. Study of the competitiveness of the enterprise's products.

68. Collection of information for making management decisions on pricing.

69. Assessing the accuracy and reliability of modeling results.

70. Relative estimation accuracy.

71. Algorithmization of system models.

72. Development and machine implementation of models of management systems

73. Technology of conducting Foresight research

74. Triangle of Foresight methods. Diamond of Foresight methods.

75. Stages of foresight - research. Rules for forming foresight.

76. Communications in management and their role. Types of management information.

77. Internal variables of the organization: goals, objectives, structure, technology, personnel.

78. Delegation of powers and its role in the activities of organizations.

79. Planning as the main function of management: definition, types, stages of the planning process.

80. Managing change in an organization.

81. Control functions.

82. Competitive strategies according to M. Porter

83. Methods and models of strategic diagnostics

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96. Algorithmization of system models.

97. Development and machine implementation of models of management systems

98. Technology of conducting Foresight research

99. Triangle of Foresight methods. Diamond of Foresight methods.

100. Stages of foresight - research. Rules for forming foresight

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Examination form

MINISTRY OF SCIENCE AND HIGHER EDUCATION
RUSSIAN FEDERATION
FEDERAL STATE AUTONOMOUS EDUCATIONAL
HIGHER EDUCATION INSTITUTION
"MOSCOW POLYTECHNIC UNIVERSITY"
(MOSCOW POLYTECH)

Faculty of Economics and Management
Department of Management
Discipline: Business process management tools
Direction of training: 03/38/02 “Management”

EXAMINATION TICKET No. 1.

1. A question assessing the competence of PC-2.
2. Question assessing the competence of PC-2

Approved at the department meeting “__” August 202_, protocol No. 1.

Head Department of Management _____ /Alenina E.E./