

Документ подписан простой электронной подписью  
Информация о владельце:  
ФИО: Максимов Алексей Борисович  
Должность: директор департамента по образовательной политике  
Дата подписания: 31.08.2023 14:56:36  
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**

**"Methods of Management Decision-Making"**

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** the academic discipline "Methods of making managerial decisions" is the formation of practice-oriented knowledge about the qualitative, statistical and quantitative methods of developing, making managerial decisions and practical skills for their development.

**Tasks** disciplines:

- acquisition of systematic knowledge in the field of theory and practice of development and adoption of managerial decisions;
- studying the experience of effective organizations in making managerial decisions and determining the possibility of using it in the work of Russian companies;
- understanding of the mechanisms for the development and adoption of managerial decisions that correspond to the real socio-economic reality;
- mastering the practical skills and professional competencies of collecting, processing and analyzing information about the factors of the external and internal environment for the development and adoption of management decisions at the level of a business organization,
- mastering the skills of finding solutions to non-standard management problems.

## 2. The place of the discipline in the structure of the bachelor's program

The discipline "Methods of making managerial decisions" is one of the disciplines of the mandatory part (B1.1) of the bachelor's degree program.

The discipline "Methods of making managerial decisions" is interconnected logically and content-methodologically with the following disciplines and practices of the EP:

In the base part (B1.1):

- Fundamentals of management;
- Business process management.

In the variable part of the basic cycle (B1.2):

- Organization development management;

## 3. The list of planned learning outcomes for the discipline (module), correlated with the planned results of mastering the educational program.

As a result of mastering the discipline, students form the following competence and the following learning outcomes should be achieved as a stage in the formation of the relevant competence:

Competency code	As a result of mastering the educational program, the student must have	List of planned learning outcomes by discipline
-----------------	---	---

OPK-3	Able to develop sound organizational and managerial decisions taking into account their social significance, promote their implementation in a complex and dynamic environment and evaluate their consequences	<b>know:</b> Classification of management decisions <b>be able to:</b> Select methods for making managerial decisions, taking into account the characteristics of classification groups <b>own:</b> Methods for optimizing management decisions
PC-6	The ability to form possible solutions based on the target indicators developed for them, as well as to analyze, justify and select solutions	<b>know:</b> The main theoretical and methodological provisions of the quantitative and qualitative analysis of information when making managerial decisions to be able to: Adapt management models to practical tasks <b>own:</b> Quantitative and qualitative information analysis skills

#### 4. Structure and content of the discipline

##### **For full-time - part-time education:**

The total labor intensity of the discipline is 5 credit units, i.e. 180 academic hours (of which 126 hours are independent work of students).

**Second term:**lectures - 9 hours, seminars - 18 hours, form of control - test.

**Third semester:**lectures - 9 hours, seminars - 18 hours, the form of control - an exam.

The structure and content of the discipline "Methods of making managerial decisions" in terms of terms and types of work are reflected in the appendix.

##### **The content of the sections of the discipline**

##### **Topic 1: Management decisions: concept, role and place in management**

The decision and its role in the activities of the manager. The concept of "management decision". Subject and object of the decision. Requirements for modern managers. Classification of management decisions. Requirements for management decisions and the conditions for their achievement. Forms of preparation and implementation of management decisions.

##### **Topic 2: Problems in the organization and methods for identifying them**

Problem situation, problem concept. Problems in the organization and methods for their detection. Reasons why problem identification is difficult. Type of deficiency in the organization. To identify problems or weaknesses, methods are used: benchmarking, questionnaire method, weakness analysis method, SWOT analysis.

### **Topic 3: Rationality and success of decisions**

The subject of the decision (DM). Individual and collective solutions. Rationality and success of decisions. Requirements for rational decisions. Target orientation of decisions. Transform problems into goals. Basic requirements for the system of goals. Rationality and success of decisions. Target orientation of decisions. Target characteristics. Fundamental and instrumental goals. Basic requirements for the system of goals. Goal Tree Technique

### **Topic 4 Criteria for compromise group decisions**

Criterion of unanimity (consensus). Single voting criterion. Pairwise comparison criterion. Borda's criterion. Pros and cons of each method. decision-making scheme by consensus. The main functions in decision-making by consensus. When consensus cannot be reached. Personal characteristics influencing the decision-making process.

### **Topic 5. Theories and models of decision making**

Decision making process. Theories of decision making. Basic elements of the decision model. Normative (prescriptive) theories of decisions. The concept of maximum utility. The concept of bounded rationality. Descriptive (descriptive) theories of solutions. Common decision making models. increment model. Conflict decision model. Political model of decisions. The model of organized anarchy.

### **Topic 6. Finding alternative solutions to problems**

Logical techniques for finding alternative solutions to problems and creative techniques. Thought mapping. Relevance tree. Multicard technology. Group work on computers. ABC analysis. Cause and effect diagram. Scripting technique. "Forest" meetings. Creative techniques for finding alternatives. Brainstorm. Destructive-constructive brainstorming. Method 635. Brainwriting-pool. The principle of problem reformulation. Bisociation. Synectics (technique of analogies). Fantastic trip. Thinking Hats and Thinking Chairs. Osborne Questionnaire.

### **Topic 7 Decision making under certainty**

The concept of the certainty condition. Decision maker (decision maker) and his attitude to goals. Strategies in case of competition of goals. Paradoxes of intuitive preferences. Simpson's paradox, Elsborg's paradox, "Effect of possession", Method of equal exchanges.

### **Topic 8. Decision making under risk and uncertainty**

terms of uncertainty. Wald's rule (maximin rule, minimax rule). Maximax-rule (minimin-rule). Gurvich's rule (rule of optimism-pessimism). Savage-Negan rule (rule of minimax regret). Laplace's rule. Crelle's rule. Decision making under risk. Bayesian rule (Bayes theorem). Bernoulli's rule (Bernoulli's law or equation). Rule of modal meaning (axiom of rationality). Furstner's rule.

### **Topic 9. Expert methods in decision making**

Methods of expert assessments. Expert selection methods. Objective and subjective methods of selection of experts. an objective approach can be documentary and experimental. Subjective approach of expert selection methods: attestation, method of mutual evaluation, method of self-assessment of the degree of competence and objectivity. Organization of work of experts. Internal or individual factors are determined by the individual qualities of the expert. External or social factors are determined by the environment. Varieties of expert assessments. Delphi method.

### **Topic 10. Game theory in the practice of managerial decision-making**

The most famous models of game theory. Classification and models of games. The most common examples of games. Hurwitz criterion. Savage's criterion. Game Prisoner's Dilemma.

### **Topic 11. Mathematical methods of decision making**

Linear programming method. Enlarged production planning Product assortment planning. Drawing up the optimal technological way of production. Process control. Inventory regulation. Mathematical expectation of a discrete random variable. The dispersion of a random variable. Dispersion properties. Graphic method.

### **Topic 12: Information in the management decision-making system**

Management information: essence and classification. Unrecorded sources of management information. information requirements. Requirements for sources of information. Sources of information. Methods for obtaining information. Quantitative information: accounting and non-accounting information.

### **Topic 13. Decision management techniques.**

Management by results. Goal management. Partial goals and total goal. Exception management. Mediocrity management. Practical methods for improving management. Reward level. Participatory management. Participation of employees of the organization in decision-making. Employee participation in profits and ownership. Participation of workers in management.

### **Topic 14. Responsibility of managers for management decisions**

Definition of liability and its types. professional responsibility. Disciplinary responsibility. Administrative responsibility. Material liability. economic responsibility. Political and party responsibility. Responsibility in the field of science and technology as an example of the responsibility of managers for management decisions. Difficulty allocating responsibility. The moral responsibility of organizations and collective responsibility.

### **Topic 15. Ethical issues of decision making**

Ethics of conduct. Fundamentals of unethical behavior. General human and professional ethics. Leadership mistakes in decision making. Subjective and objective errors.

### **Topic 16. Forecasting management decisions**

Theoretical Foundations of Forecasting Management Decisions. sources of uncertainty. Principles of organizing work on forecasting. Stages of forecasting. Preparing to develop a forecast. Analysis of retrospective information. Determination of the most probable options for the development of internal and external conditions of the object of forecasting. Conducting an examination. Development of alternative options. A priori and a posteriori estimation of forecast quality. Monitoring the implementation progress and adjusting the forecast.

### **Topic 17. Registration of management decisions and control over their implementation**

Requirements for the execution of management decisions. Basic requirements for paperwork include: general requirements; composition of details; document forms. Indicators for analysis and evaluation. Economic feasibility of the document. Method of indirect object operation. Stages of the modeling process. Scientific approaches to the

development of documents. The system of accounting and control over the implementation of management decisions. Types of control. Controlling.

### **Topic 18. Effectiveness of management decisions**

The essence of the concepts of "efficiency" and "effectiveness of management decisions". Types of efficiency: organizational, economic, social, technological, psychological, legal, environmental, ethical and political. Methods for calculating efficiency.

## **5. Educational technologies**

The methodology for teaching the discipline "Methods of making managerial decisions" and the implementation of a competency-based approach in the presentation and perception of the material provides for the use of the following active and interactive forms of conducting group, individual, classroom classes in combination with extracurricular work in order to form and develop the professional skills of students:

- lectures;
- preparation for seminars;
- preparation, presentation and discussion of reports at seminars;
- organization and conduct of current control of students' knowledge in the form of testing.

The proportion of classes conducted in interactive forms is determined by the main goal of the educational program, the peculiarity of the contingent of students and the content of the discipline "Methods of making managerial decisions" and in general for the discipline is 50% of the classroom.

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

In the learning process, the following assessment forms of independent work of students, assessment tools for monitoring progress and intermediate assessments are used:

Evaluative means of monitoring progress include control questions and tasks in the form of blank testing, participation in a business game, and presentation of a report.

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 posted in the LMS of the Moscow Poly (<https://online.mospolytech.ru/course/view.php?id=285>).

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.

Samples of questions and tasks for conducting current control are given in the appendix.

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

**6.1.1. A 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 competence is formed:

Competency code	As a result of mastering the educational program, the student must have
OPK-3	Able to develop sound organizational and managerial decisions taking into account their social significance, promote their implementation in a complex and dynamic environment and evaluate their consequences
PC-6	The ability to form possible solutions based on the target indicators developed for them, as well as to analyze, justify and select solutions

In the process of mastering the educational program, this competence, including their individual components, is 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 (module), 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).

<b>OPK-3</b> -Able to develop sound organizational and managerial decisions taking into account their social significance, promote their implementation in a complex and dynamic environment and evaluate their consequences				
<b>Index</b>	<b>Evaluation criteria</b>			
	2	3	four	5

<p><b>know:</b> Classification of management decisions.</p>	<p>student demonstrates complete absence or insufficient knowledge theoretical adoption issues managerial decisions</p>	<p>student demonstrates incomplete correspondence of knowledge theoretical adoption issues managerial solutions. Allowed significant mistakes, appears failure knowledge, in a number indicators, student experiencing significant difficulties in operating knowledge in their transfer to new situations.</p>	<p>student demonstrates partial conformity knowledge theoretical adoption issues managerial decisions, but allowed minor mistakes, inaccuracies, difficulties in analytical operations.</p>	<p>student demonstrates full compliance following knowledge theoretical adoption issues managerial decisions, freely operates shadow knowledge.</p>
<p><b>be able to:</b> Pick Methods acceptance managerial decisions taking into account features classification x groups</p>	<p>The student is not can or insufficient degree can: develop and compare alternatives decisions</p>	<p>student demonstrates incomplete conformity the following skills: develop and compare alternatives solutions. Allowed significant mistakes, appears failure skills, in a row indicators, the student experiences significant difficulties in operating skills when transferring them to new situations.</p>	<p>student demonstrates partial conformity next skills: develop and compare alternatives solutions. Skills mastered, but allowed minor mistakes, inaccuracies, difficulties in analytical operations, transferring skills to new ones, non-standard situations.</p>	<p>student demonstrates full compliance the following skills: develop and compare alternatives solutions. Free operates acquired skills, applies them in situations elevated difficulties.</p>
<p><b>own:</b> Methods optimization managerial decisions</p>	<p>The student is not owns or insufficient degree owns calculation skills risks in optimization managerial solutions.</p>	<p>student in insufficient degree owns calculation skills risks in optimization managerial solutions allowed significant mistakes, appears</p>	<p>student partially owns skills calculation skills risks in optimization managerial decisions, but allowed minor mistakes, inaccuracies,</p>	<p>student in in full owns the skills risk calculation for optimization managerial decisions, freely applies acquired skills in situations elevated difficulties.</p>



		failure skills in a row indicators, student experiencing significant difficulties in application skills in new situations.	difficulties in analytical operations, transfer of skills for new ones, non-standard situations.	
<b>PC-6</b> -The ability to form possible solutions based on the target indicators developed for them, as well as to analyze, justify and select solutions				
<b>Index</b>	<b>Evaluation criteria</b>			
	<b>2</b>	<b>3</b>	<b>four</b>	<b>5</b>
. know: Main theoretical methodical provisions quantitative and quality analysis information when acceptance managerial decisions	student demonstrates complete absence or insufficient conformity the following knowledge: basic techniques statistical and economic mathematical analysis at acceptance managerial solutions.	student demonstrates incomplete conformity the following knowledge: basic techniques statistical and economic mathematical analysis at acceptance managerial solutions. Allowed significant mistakes, appears failure knowledge, in a number indicators, student experiencing significant difficulties in handling knowledge while transferring it to new situations.	student demonstrates partial conformity the following knowledge: basic techniques statistical and economic mathematical analysis at acceptance managerial decisions, but allowed minor mistakes, inaccuracies, difficulties in analytical operations.	student demonstrates full compliance the following knowledge: on the main basic techniques statistical and economic mathematical analysis at acceptance managerial decisions, freely operates shadow knowledge
be able to: Adapt managerial models to practical tasks	The student is not can or insufficient degree can: correctly generalize quantitative data, identify relationships between factors, draw qualitative conclusions about results of work	student demonstrates incomplete conformity the following skills: correctly summarize quantitative data, identify relationships between factors do	The student demonstrates a partial conformity the following skills: correctly generalize quantitative data, identify relationships between factors, draw qualitative conclusions about results of work based	The student demonstrates full compliance with the following skills: correctly summarize quantitative data, identify relationships between factors, draw qualitative conclusions about results of work based

	based collected and generalized quantitative data.	qualitative conclusions about results of work based collected and generalized quantitative data. Allowed significant mistakes, appears failure skills, in a row indicators, student experiencing significant difficulties in operating skills at their transfer to new situations.	on collected and summarized quantitative data. Skills mastered, but allowed minor mistakes inaccuracies, difficulties in analytical operations, transferring skills to new ones, non-standard situations.	on collected and summarized quantitative data. Operates freely acquired skills, apply them in situations of increased complexity.
own: Skills quantitative and quality analysis information	The student is not owns or insufficient degree owns skills to work with normative documents, regulating and professional official activity	student owns major skills to work with normative documents, regulating and professional official activity, allowed significant mistakes, appears failure skills in a row indicators, student has significant difficulty in applying skills in new situations.	student partially owns analytical skills to work with normative documents, regulating and professional official activity, but allowed minor mistakes, inaccuracies, difficulties in analytical operations, transfer skills for new non-standard situations.	student in in full owns the skills work with normative documents, regulating and professional official activity, applies freely acquired skills in situations elevated difficulties.

Scales for assessing the results of intermediate certification and their description:

***Form of intermediate certification in the second semester: credit.***

Intermediate attestation of students in the form of a test is carried out based on the results of the implementation of all types of educational work provided for by the curriculum for a given discipline (module), while taking into account the results of current monitoring of progress during the semester. The assessment of the degree of achievement by students of the planned learning outcomes in the discipline (module) is carried out by the teacher conducting classes in the discipline (module) by the method of expert

assessment. According to the results of the intermediate certification, “pass” or “not pass” is set.

*Only students who have completed all types of educational work provided for by the work program in the discipline "Methods of making managerial decisions" are allowed to the intermediate certification (passed the intermediate control)*

Evaluation scale	Description
Passed	All types of educational work provided for by the curriculum were completed. The student demonstrates the correspondence of knowledge, skills and abilities given in the tables of indicators, operates with the acquired knowledge, skills, skills, applies them in situations of increased complexity. In this case, minor errors, inaccuracies, difficulties in analytical operations, transferring knowledge and skills to new, non-standard situations can be made.
Not credited	One or more types of educational work provided for by the curriculum have not been completed. The student demonstrates incomplete correspondence of knowledge, skills and abilities given in the tables of indicators, significant errors are made, lack of knowledge, skills, skills is manifested in a number of indicators, the student experiences significant difficulties in operating knowledge and skills when transferring them to new situations.

***Form of intermediate certification in the third semester: exam.***

Intermediate certification of students in the form of an exam is carried out based on the results of all types of educational work provided for by the curriculum for a given discipline (module), while taking into account the results of current monitoring of progress during the semester. The assessment of the degree of achievement by students of the planned learning outcomes in the discipline (module) is carried out by the teacher conducting classes in the discipline (module) by the method of expert assessment. Based on the results of the intermediate attestation for the discipline (module), the mark "excellent", "good", "satisfactory" or "unsatisfactory" is given.

*Only students who have completed all types of educational work provided for by the work program in the discipline "Methods of making managerial decisions" are allowed to the intermediate certification (passed the intermediate control)*

Evaluation scale	Description
Excellent	All types of educational work provided for by the curriculum were completed. The student demonstrates the correspondence of knowledge, skills and abilities given in the tables of indicators, operates with the acquired knowledge, skills, skills, applies them in situations of increased complexity. In this case, minor errors, inaccuracies, difficulties in analytical operations, transferring knowledge and skills to new, non-standard situations can be

	made.
Good	All types of educational work provided for by the curriculum were completed. The student demonstrates incomplete, correct correspondence of knowledge, skills, and abilities given in the tables of indicators, or if 2-3 minor errors were made at the same time.
Satisfactorily	All types of educational work provided for by the curriculum were completed. The student demonstrates the conformity 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	One or more types of educational work provided for by the curriculum have not been completed. The student demonstrates incomplete correspondence of knowledge, skills and abilities given in the tables of indicators, significant errors are made, the lack of knowledge, skills and abilities is manifested in a number of indicators, the student experiences significant difficulties in operating knowledge and skills when transferring them to new situations.

**The evaluation funds are presented in the annex to the work program.**

## **7. Educational, methodological and information support of the discipline "Methods of making managerial decisions"**

### **a) basic literature:**

1. Methods of making managerial decisions: a textbook for universities / P. V. Ivanov [and others]; edited by P. V. Ivanov. — 2nd ed., corrected. and additional - Moscow: Yurayt Publishing House, 2022. - 276 p. - (Higher education). - ISBN 978-5-534-10862-0. — Text: electronic // Educational platform Urayt [website]. — URL: <https://urait.ru/bcode/494754> (date of access: 11/13/2022).

2. Management: methods of making managerial decisions: a textbook for secondary vocational education / P. V. Ivanov [and others]; edited by P. V. Ivanov. — 2nd ed., corrected. and additional - Moscow: Yurayt Publishing House, 2022. - 276 p. - (Professional education). — ISBN 978-5-534-13050-8. — Text: electronic // Educational platform Urayt [website]. — URL: <https://urait.ru/bcode/495414> (date of access: 11/13/2022).

### **b) additional literature:**

1. Mkrtychyan, G. A. Management decision making: textbook and workshop for universities / G. A. Mkrtychyan, N. G. Shubnyakova. - Moscow: Yurayt Publishing House, 2022. - 140 p. - (Higher education). — ISBN 978-5-534-13827-6. — Text: electronic // Educational platform Urayt [website]. — URL: <https://urait.ru/bcode/496724> (date of access: 11/13/2022).

The possibility of using e-learning, distance learning technologies is provided. All materials are placed in the LMS of the Moscow Poly. (<https://online.mospolytech.ru/course/view.php?id=285>)

#### **eight.**Logistics support of discipline.

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

### **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 take notes, which will later allow you to recall the studied educational material, supplement the content during independent work with literature, and prepare for the exam.

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. In interactive classes, students should be active.

### **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. To perform independent work, methodological support is provided. 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. Methodological recommendations 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:**

Candidate of Economics, Associate Professor of the Department of Management



/ Korotun O.N. /

**The program was approved at a meeting of the department "Management"**

August 29, 2022, Protocol No. 1

Head of the Department "Management"

k. e. PhD, Associate Professor



/ Alenina E.E. /





**Structure and content of the discipline  
"Methods of making managerial decisions"  
in the direction of preparation 38.03.02 "Management" (bachelor)  
educational program "Business Process Management"  
Part-time education**

n/ n	Chapter	Semester	Semester week	Types of educational work, including independent student work, and labor intensity in hours					Types of independent work students					Forms of attestation		
				L	F/N	Lab	SRS	DAC	UO	To	DI	R	DC	T	E	Z
one	Topic 1 Management decisions: concept, role and place in management	2	1-2	1	2		7						+			+
2	Topic 2 Problems in the organization and methods for identifying them	2	3-4	1	2		7						+			+
3	Topic 3 Rationality and success of decisions	2	5-6	1	2		7						+			+
four	Topic 4 Criteria for compromise group decisions	2	7-8	1	2		7						+			+
5	Topic 5 Theories and models of decision making	2	9-10	1	2		7						+			+
6	Topic 6 Finding Alternative Solutions to Problems	2	11-12	1	2		7						+			+
7	Topic 7 Decision making under certainty	2	13-14	1	2		7						+			+
eight	Topic 8 Decision making under risk and uncertainty	2	15-16	1	2		7						+			+
9	Topic 9 Expert methods in decision making	2	17-18	1	2		7						+			+
ten	Topic 10 Game theory in the practice of managerial decision-making	3	1-2	1	2		7						+		+	
eleven	Topic 11 Mathematical methods of decision making	3	3-4	1	2		7						+		+	
12	Topic 12 Information in the management decision-making system	3	5-6	1	2		7						+		+	

13	Topic 13 Decision management techniques.	3	7-8	1	2		7						+		+	
fo urt ee n	Topic 14 Responsibility of managers for management decisions	3	9-10	1	2		7						+		+	
fift ee n	Topic 15 Ethical issues in decision making	3	11-12	1	2		7						+		+	
16	Topic 16 Forecasting management decisions	3	13-14	1	2		7						+		+	
17	Topic 17 Registration of management decisions and control over their implementation	3	15-16	1	2		7						+		+	
eig hte en	Topic 18 Effectiveness of management decisions	3	17-18	1	2		7						+		+	
	<i>Appraisal Form</i>												1		E	Z
	Total hours per discipline			18	36		126									

MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN FEDERATION

FEDERAL STATE BUDGETARY EDUCATIONAL INSTITUTION OF HIGHER EDUCATION

**"MOSCOW POLYTECHNIC UNIVERSITY"**

**(MOSCOW POLYTECH)**

Direction of training: 38.03.02 "Management"

EP (educational program): "Business Process Management"

Form of study: full-time, part-time

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

Department: "Management"

**VALUATION FUND**

**BY DISCIPLINE**

**"METHODS OF MANAGEMENT DECISION MAKING"**

Composition: 1. Passport of the fund of appraisal funds

2. Description of assessment tools: questions for credits, tests, topics of reports

**Compiled by:**

Associate Professor, Ph.D.

Korotun O.N.

Moscow, 2022

## INDICATOR OF THE LEVEL OF FORMATION OF COMPETENCES

MANAGEMENT DECISION-MAKING METHODS					
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				
OPK-3	Able to develop sound organizational and managerial decisions taking into account their social significance, promote their implementation in a complex and dynamic environment and evaluate their consequences	<p><b>Know:</b> Classification of management decisions</p> <p><b>Be able to:</b> Select methods for making managerial decisions, taking into account the characteristics of classification groups</p> <p><b>Own:</b> Methods for optimizing management decisions</p>	lecture, independent work, seminars	DS, DIS, Z, E	<p><b>A basic level of</b> Own methods of optimizing management decisions</p> <p><b>Enhanced level</b> able to carry out business planning in non-standard, complex situations.</p>
PC-6	The ability to form possible solutions based on the target indicators developed for them, as well as to analyze, justify and select solutions	<p><b>know:</b> The main theoretical and methodological provisions of the quantitative and qualitative analysis of information in making managerial decisions</p> <p><b>be able to:</b> Adapt management models to practical tasks</p> <p><b>own:</b> Quantitative and qualitative information analysis skills</p>	lecture, independent work, seminars	DS, DIS, Z, E	<p><b>A basic level of</b> Possess the skills of quantitative and qualitative analysis of information</p> <p><b>Enhanced level</b> able to build economic, financial and organizational and managerial models</p>

## List of assessment tools by discipline

### Management decision-making methods

OS number	Name of the evaluation tool	Brief description of the evaluation tool	Presentation of the evaluation tool in the FOS
one	Report, message (DS)	The product of the student's independent work, which is a public performance on the presentation of the results of solving a specific educational, practical, educational, research or scientific topic	Topics of reports, messages
2	Debate (DIS)	Evaluation tools that 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.	Enumeration of the topics of practical lessons.
3	Pass (D)	The final form of knowledge assessment. In higher education institutions are held during examination sessions.	Questions for offset
four	Exam (E)	The final form of knowledge assessment. In higher education institutions are held during the session.	Questions for the exam

### Questions for the test in the discipline

#### Management decision-making methods formation of the competence of OPK-3

1. The concept of "quality of managerial activity" and "quality of managerial decision".
2. The concept of "method", "model", "algorithm", "simulation".
3. Advantages and disadvantages of involving consultants in making management decisions.
4. Characterization of approaches to the development and choice of management decisions under risk and uncertainty.
5. Characterization of the stages of the modeling process.
6. Characteristics of management decision-making methods.
7. Characteristics of the models used in making managerial decisions.
8. The authority of the individual on the process of development and decision-making.
9. Causes of conflicts in the process of making and implementing managerial decisions.
10. Organization of the implementation of the adopted management decision.
11. Motivation and staffing for the implementation of management decisions.
12. Meaning, functions and types of control over the implementation of management decisions.

### Formation of competence PC-6

13. Limited use of modeling in making managerial decisions.
14. Selection of a criterion for evaluating the effectiveness of a management decision under risk and uncertainty.
15. Organizational hierarchy of making managerial decisions.
16. Management of conflict situations in the process of making and implementing managerial decisions.
17. The role of the synergetic effect in the implementation of management decisions.
18. Methods for monitoring and evaluating the execution of a decision.
19. Responsibility for the implementation of decisions: essence and types.
20. Approaches to assessing the effectiveness of management decisions.
21. Analysis and selection of alternatives in making managerial decisions.
22. Justification and verification of the feasibility of alternatives. Features of the development of management decisions in corporations.
23. The main parameters of the process of analyzing the external environment for the adoption and implementation of management decisions.

**Questions for the exam in the discipline  
Management decision-making methods  
formation of the competence of OPK-3**

1. Quantitative methods of making managerial decisions
2. Qualitative methods of making managerial decisions
3. decision tree
4. The problem of optimization in making managerial decisions on the development of production
5. Rank methods of expert decisions
6. Modern concepts of development of managerial decision.
7. The role and responsibility of the leader in decision-making.
8. Characteristics of information support for making managerial decisions.
9. Classification features of management decisions.
10. Characteristics of individual and group decision-making.
11. Modern principles of development of managerial decision.
12. Rules for making a collective decision.
13. Economic optimization of managerial decision making.
14. Problems of choosing criteria in making managerial decisions.
15. Comparative characteristics of modern standard processes for making managerial decisions.
16. Problems of centralization and decentralization of the solution development process.
17. Advantages and disadvantages of involving consultants in making management decisions.
18. Characterization of approaches to the development and choice of management decisions under risk and uncertainty.
19. Characterization of the stages of the modeling process.
20. Characteristics of management decision-making methods.

21. Characteristics of the models used in making managerial decisions.
22. The authority of the individual on the process of development and decision-making.
23. Causes of conflicts in the process of making and implementing managerial decisions.
24. Organization of the implementation of the adopted management decision.
25. Meaning, functions and types of control over the implementation of management decisions.
26. Selection of a criterion for evaluating the effectiveness of a management decision under risk and uncertainty.
27. Limited use of modeling in making managerial decisions.
28. Organizational hierarchy of making managerial decisions.
29. Management of conflict situations in the process of making and implementing managerial decisions.

### **Formation of competence PC-6**

30. Responsibility for the implementation of decisions: essence and types.
31. Approaches to assessing the effectiveness of management decisions.
32. Analysis and selection of alternatives in making managerial decisions.
33. Decision making under uncertainty
34. Decision making under certainty
35. Decision making under risk
36. How decisions are applied in the Borda method
37. Paradoxes of Intuitive Preferences
38. Decipher Simpson's Paradox
39. Finding solutions under conditions of certainty with multiple goals
40. Creative techniques in decision making
41. Method 635 and the principle of problem reformulation
42. Logical Techniques for Finding Alternative Solutions to Problems
43. Thought Mapping
44. Unlock the multi-card technique
45. ABC analysis for decision making
46. Causal Diagram and Scenario Technique
47. Tell us about the incremental model, the conflict decision model, the political decision model, the model of organized (managed) anarchy.
48. Information support for managerial decision-making
49. The role of information in the decision-making process
50. The role of new information technologies in the development of management decisions
51. The role of the human factor in the process of preparing managerial decisions
52. Forms of preparation of management decisions.



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

---

Faculty of Economics and Management, Department of "Management"

Discipline: Management decision-making methods

Direction of training: 38.03.02 "Management"

Course: \_\_, group \_\_\_\_\_, form of education: full-time, part-time

TICKET #1.

1. Question assessing the competence of the defense industry-3
2. Competency Question PC-6

Approved at the meeting of the department "29" August 2022, protocol No. 1.

Head Department of "Management" \_\_\_\_\_ /Alenina E.E./

---

**Topics for discussions (discussions) by discipline**  
**Management decision-making methods**

Question number 1 - the formation of the competence of the OPK-3.

Question number 2 - the formation of the competence of PC-6

**Option 1**

1. To characterize the processes of development, adoption and implementation of management decisions.

2. Why decision making is considered as the basis of any management process in an organization. Illustrate the answer with examples.

**Option 2.**

1. What are the features of the personal characteristics of decision makers when making managerial decisions. Illustrate the answer with examples.

2. On a specific example, give examples of decisions made. What types of classification of management decisions do they belong to. Give a brief description of the development and decision-making procedures in your organization. How do they align with the general management principles applied in your organization.

**Option 3**

1. Characterization of the advantages and disadvantages of using various methods for developing management decisions for the development of management decisions (expert method, scenario method, decision tree method, brainstorming method, heuristic methods) Illustrate the answer with examples.

2. On a specific example, give examples of decisions made. What types of classification of management decisions do they belong to. Give a brief description of the development and decision-making procedures in your organization. How do they align with the general management principles applied in your organization.

#### **Option 4**

1. The problem of centralization and decentralization of power in the development, adoption and implementation of management decisions. Illustrate the answer with examples.

2. The role and significance of uncertainty and risk in the development and adoption of management decisions.

- Rating "excellent": deep and lasting assimilation of program material; complete, consistent, competent and logically presented answers when modifying the task; freely coping with the tasks, knowledge of the material; well-founded decisions; possession of versatile skills and techniques for performing practical tasks.

- Rating "good": knowledge of the program material; competent presentation, without significant inaccuracies in the answer to the question; correct application of theoretical knowledge; possession of the necessary skills in performing practical tasks.

- Grade "satisfactory": assimilation of the main material; when answering, inaccuracies are allowed; insufficiently correct wording when answering; violation consistency in the presentation of program material; difficulties in performing practical tasks;

- Rating "unsatisfactory": no knowledge of the program material; errors occur when answering; difficulties in performing practical tasks.

### **Message topics by discipline**

#### **Management decision-making methods**

#### **(formation of competencies of GPC-3 and PC-6)**

1. Application of SWOT-analysis in the development and adoption of SD.
2. The role and functions of decisions in the management process.
3. Typology and classification of management decisions.
4. Situational and behavioral factors influencing the development of managerial decisions.
5. Information support of decisions and Information Security.
6. Information support of director's decisions.
7. Influence of traditions and specifics of the enterprise on the development of management decisions.
8. The role of the human factor in the process of developing a management decision.
9. Ethical foundations of managerial decision.
10. Problems of improving the methodology for developing SD in a technical system.
11. The ratio of new and well-known SD in venture companies.

12. Formation and classification of SD for the family.
13. Analysis and improvement of the relationship between science and art in the development of management decisions.
14. Features of the development of SD in human-machine systems.
15. Modern trends in the use of information technology in the process of developing a management decision.
16. Software tools for automating the elements of creative activity.
17. Technology for the development of management decisions.
18. Building the structure of the problem field and structuring the causes.
19. Problems affecting the quality of managerial decisions.
20. Democratization of the processes of development of managerial decisions.
21. Organization and effectiveness of the use of expert assessments.
22. Intellectual activity in the development of management decisions.
23. Modern methods for calculating the effectiveness of management decisions.
24. Features of the development of management decisions in small enterprises.
25. Organization of the implementation of the decisions made.
26. Forms of development and implementation of SD.
27. Classification of situations and problems in the development of management decisions.
28. A systematic approach to the development of SD.
29. The priority of the goal in the development of SD.
30. Results-based management is one of the tools for implementing the goals of a management decision.

#### Message Evaluation Criteria

No.	Criterion	Grade			
		ex.	choir.	satisfactory	unsatisfactory
one	Report Structure	The report contains semantic parts, balanced in volume	The report contains three semantic parts, unbalanced in volume	One of the semantic parts of the report is missing	The report does not trace the presence of semantic parts
2	Content 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	Ownership of the material	The student fully owns the material presented, is oriented in the problem, freely answers questions	The student owns the material presented, is oriented in the problem, finds it difficult to answer some questions	The student is not fluent enough in the material presented, poorly oriented in the problem	The student does not own the material presented, poorly oriented in the problem
four	Relevance to the topic	The presented material is fully consistent with 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	The material presented is slightly relevant to the topic.

				not related to the topic.	
--	--	--	--	---------------------------	--