

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

"Digital literacy"

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

The discipline "Digital Literacy" is aimed at developing the abilities necessary for the safe and efficient use of a computer and Internet resources. This includes the ability to use office software such as word processors, email and presentation software; the ability to create and edit images / audio / video; the ability to use a web browser and Internet search engines.

The main goal of mastering the discipline "Digital Literacy" should include:

- the development of universal and subject-specialized competencies that contribute to a professional career and self-realization, allowing the graduate to successfully carry out research activities, work in the administration, state authorities and local governments, engage in analytical and expert activities, work in the media and journalism, engage in museum, archives, archeology, protection and restoration of historical monuments, and other activities related to the use of digital technologies.

To the main tasks mastering the discipline "Digital Literacy" should include:

- form a general idea of how the digital environment works
- (search engines, maps, spam and contextual advertising, etc.);
- develop elementary skills of a general nature related to
- security of working with data on a computer and the Internet;
- to form professional skills: work with bibliographic

links, working with data in Microsoft Excel, advanced text search tools, information visualization, etc.;

- develop the ability to use and create content based on digital technologies, including the search and exchange of information, answering questions, interacting with other people and computer programming.

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

Discipline "Digital Literacy" is one of the academic disciplines of the mandatory part (B.1.1.05) of the bachelor's degree program.

Discipline "Digital Literacy" is interconnected with the following disciplines and practices of the EP:

In the main part of the basic cycle (B.1.1):

- Foreign language;
- Management of distributed communities.

In the part formed by the participants of educational relations (B1.2):

- Digitization of management processes.

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 (module), 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
4. OPK-5	Able to use modern information technologies and software in solving professional problems, including the management of large data arrays and their intellectual analysis	IOPC-5.1. Knows modern methods of using information technologies and software, including the management of large data sets and their intellectual analysis. IOPC-5.2. Able to use modern information technologies and software in solving professional problems, including the management of large data arrays and their intellectual analysis. IOPC-5.3. He has the skills to use modern information technologies and software tools in solving professional problems, including the management of large data arrays and their intellectual analysis.
OPK-6	Able to understand the principles of operation of modern information technologies and use them to solve problems of professional activity	IOPC-6.1. Knows the principles of operation of modern information technologies and the methodology of their use to solve the problems of professional activity. IOPC-6.2. Able to apply the principles of modern information technology to solve problems of professional activity. IOPC-6.3. Has the skills to use modern information technologies to solve the problems of professional activity.

Structure and content of the discipline

Part-time education

The total labor intensity of the discipline is 2 credit units, i.e. 72 academic hours (of which 36 hours are independent work of students).

The discipline is studied in the first year.

First semester: lectures - 18 hours, seminars - 18 hours, form of control - test.

The structure and content of the discipline "Digital Literacy" by terms and types of work are reflected in the Appendix.

The content of the sections of the discipline

Topic 1. Basic skills of working on a personal computer.

The topic discusses the general principles of working on a computer, organizing information, working with files and folders, word processing technologies, working with spreadsheets, creating presentations using office applications.

Fundamentals of working with a computer.

Personal computer device. Turning on and off. Mouse and keyboard. Rules for using the mouse. Assignment of buttons on the keyboard. Pictograms, launching programs. Start menu. Task bar. Working with windows. Windows Help System. Using search. Standard Windows Applications. Actions on failures. Overview of operating systems. Characteristics of the processor, hard disk, RAM. Peripherals, printer (inkjet, laser), scanner, multifunction device.

Seminar 1. Files and folders. Organization of information.

Desktop. Icons and labels. Folder "Computer". Disks. Disk volume. System folders. Sort folder contents. Search, copy, move and delete files and folders. Copying files from external media. File types. Working with multimedia. External storage media.

Seminar 2. Work with office applications.

Text editors. Getting started in a text editor. Text editing and formatting. Inserting text snippets. Saving a document. Printout. Closing the program. Fundamentals of working with spreadsheets. Creating a table, sorting data. Presentation basics. Creation of slides, insertion of graphic files. Special effects. Graphic editors (for example, Paint).

Topic 2 Telecommunication technologies.

The topic covers:

- basic principles of work on the Internet and the use of telecommunication technologies;

- Basics of working with Internet browsers;
- basics of information search and navigation on the Internet;
- the main ways of communication on the Internet.

Fundamentals of working on the Internet.

Fixed and mobile Internet, advantages and disadvantages. Internet connection. Web site. Brief overview of browsers. Structure of the browser window. Address bar. Navigation buttons. Setting up the browser window. Tab settings. Favorites tab.

Seminar 1.Navigation on the Internet.

Finding and saving information. Survey of search engines. Rules for compiling search queries. Selecting relevant information in context. Page navigation with query results. Navigation through hyperlinks. Structure of Internet addresses. Website navigation. Site structure. Online forms. Registration on the website. Personal Area. Processing of received information. Saving web pages. Saved page formats. Search, view and save pictures and videos.

Seminar 2. Communication on the Internet.

Why email is needed. Benefits of email. The structure of the email address. The concepts of "login", "mail server". Registration. Password selection. Create a mailing address. Create a mailbox. Working with a mailbox Folders. Reading letters. Creating and sending messages. Reply to email and forward message. Sending a file. The address book. Overview of programs that allow you to communicate by video link. Messengers.

Topic 3.Basic Precautions When Using the Internet

The topic contains ways to ensure information security when working on a computer, including precautions when working on the Internet:

- Computer security.
- Fundamentals of information security and personalized work with communication services.
- Spam and cyber fraud. Spam protection.

- Ethical standards in the placement of digital content.

Seminar 1.Antivirus protection.

An overview of the most popular antivirus software. Classification of computer threats. Viruses, worms, trojans. Keyboard spy. Advertising systems.

Topic 4.The use of information technology in a digital society.

The topic is devoted to the description of current trends in the world of digital technologies in terms of the use by citizens of the capabilities of computer devices and the Internet in various areas of life.

Using the possibilities of the Internet in various areas of life (education / training, work, health, travel).

Registration on sites. Travel (booking tickets and hotels via the Internet). Education. Job. Health (electronic registry).

Purchasing goods and services via the Internet. In the field of housing and communal services, communications, banks, railway, air tickets, etc. Review of online stores, payment for goods and services via the Internet and using bank cards. Fundamentals of safe work when paying for goods and services. Security when registering in a network service.

Seminar 1. Communication in social networks. Means of communication (in online conferences, chats, forums and social networks Odnoklassniki, V Kontakte). People search. Sending messages. Security questions.

Topic 5.Principles of working with resources and services of the digital economy.

The main public and private information resources are considered:

- systems for the provision of public services;
- systems for providing information about counterparties;
- departmental portals and websites;
- portals and sites of legal information.

5. Educational technologies.

The methodology for teaching the discipline "Digital Literacy" 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:

- testing;
- discussion of reports;
- performance of multi-level tasks on the use of information technology.

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

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, the following competencies are formed:

Competency code	As a result of mastering the educational program, the student must have
OPK-5	Able to use modern information technologies and software in solving professional problems, including the management of large data arrays and their intellectual analysis
OPK-6	Able to understand the principles of operation of modern information technologies and use them to solve problems of professional activity

In the process of mastering the educational program, this competence, including its 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 competence assessment at various stages of their formation is the achievement by students of the planned learning outcomes in the discipline.

Index	Not credited	Passed
IOPC-5.1. Knows modern methods of using information technologies and software, including the management of large data sets and their intellectual analysis.	The student demonstrates the complete absence or insufficient compliance of the following knowledge: methods and means of search, systematization and processing of information; the main patterns of information processes in the socio-economic sphere; foundations of state policy in the information sphere.	The student demonstrates incomplete compliance with the following knowledge: methods and means of searching, organizing and processing information; the main patterns of information processes in the socio-economic sphere; foundations of state policy in the information sphere. Significant errors are made, there is a lack of knowledge on a number of indicators, the student experiences significant difficulties in operating knowledge when transferring it to new situations.
IOPC-5.2. Able to use modern information technologies and software in solving professional problems, including the management of large data arrays and their intellectual analysis.	The student does not know how or insufficiently knows how to apply modern information technologies for searching, organizing and processing information, conducting digital analysis of information.	The student demonstrates incomplete compliance with the following skills: apply modern information technologies to search, organize and process information, conduct digital analysis of information. Significant mistakes are made, there is a lack of skills in a number of indicators, the student experiences significant difficulties in applying skills in new situations.
IOPC-5.3. He has the skills to use modern information technologies and software tools in solving professional problems, including the management of large data arrays and their intellectual analysis.	The student does not possess or insufficiently possesses the skills to apply modern technologies for collecting, systematizing and processing information that is important for the implementation of business processes in the relevant areas of professional activity.	The student has the skills to apply modern technologies for collecting, systematizing and processing information that is important for the implementation of business processes in the relevant areas of professional activity. Significant mistakes are made, there is a lack of skills in a number of indicators, the student experiences significant difficulties in applying skills in new situations.
IOPC-6.1. Knows the principles of operation of modern information technologies and the methodology of their use to solve the problems of professional activity.	The student demonstrates the complete absence or insufficient compliance of the following knowledge: principles of work of modern information technologies and methodology of their use for solving problems of professional activity..	The student demonstrates incomplete compliance with the following knowledge: the principles of operation of modern information technologies and the methodology of their use to solve the problems of professional activity. Significant errors are made, there is a lack of knowledge on a number of indicators, the student experiences significant difficulties in operating knowledge when transferring it to new situations.

IOPC-6.2. Able to apply the principles of modern information technology to solve problems of professional activity.	The student does not know how or insufficiently knows how to apply modern information technologies to solve the problems of professional activity.	The student demonstrates incomplete compliance with the following skills: apply modern information technologies to solve the problems of professional activity. Significant mistakes are made, there is a lack of skills in a number of indicators, the student experiences significant difficulties in applying skills in new situations.
IOPC-6.3. Has the skills to use modern information technologies to solve the problems of professional activity.	The student does not possess or insufficiently possesses the skills to use modern information technologies to solve the problems of professional activity.	The student has the skills to use modern information technologies to solve the problems of professional activity. Significant mistakes are made, there is a lack of skills in a number of indicators, the student experiences significant difficulties in applying skills in new situations.

Form of intermediate attestation: test.

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. Based on the results of the intermediate attestation for the discipline (module), the mark "passed", "failed" is set.

Only students who have completed all types of educational work provided for by the work program in the discipline "Digital Literacy" (test, report, performance of multi-level tasks) are allowed to intermediate certification.

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, 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 annex 1 to the work program.

7. Educational, methodological and information support of the discipline.

a) basic literature:

1. Suleimanov M.D., Bardygo N.S. Digital Literacy: Textbook. - Moscow: Creative Economy, 2019. 324 p.

URL: <https://e.lanbook.com/book/165562>

2. Digital transformation of business and new economic models: study guide / I.A. Brusakova, N.I. Zaozerskaya, K.A. Karpov. St. Petersburg: SPbGETU LETI, 2021. 144 p.

URL: <https://e.lanbook.com/book/238433>

b) additional literature:

1. Digital transformation of the economy: textbook. / IN AND. Abramov, N.L. Akulova, E.V. Anisov; ed. IN AND. Abramov. M.: NRNU-MEPHI, 2020. 252 p.

URL: <https://e.lanbook.com/book/175410>

in) software and Internet resources

- Office applications in the public domain, Adobe Acrobat Reader, Microsoft Office
- Microsoft Open License. License number 61984042.

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 program is compiled in accordance with the Federal State Educational Standard of Higher Education in the field of study bachelors 38.03.02 "Management".

The program was made by:

Head of the Department "Management"

Candidate of Economics, Associate Professor / Alenina E.E. /

Candidate of Economics, Associate Professor of the Department of Management / Redin
D.V. /

The program was approved at a meeting of the department "Management"
August 29, 2022, protocol No. 1

Head of the Department "Management"
k. e. Sc., Associate Professor / Alenina E.E. /

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

Direction of training: 38.03.02 MANAGEMENT

Form of study: full-time, part-time

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

Department: "Management"

VALUATION FUND

BY DISCIPLINE

digital literacy

Composition: 1. Passport of the fund of appraisal funds

2. Description of evaluation tools:

tests, report topics, examples of multi-level tasks and assignments, questions for the test

Compiled by:

head Department, Candidate of Economics, Assoc. Alenina E.E.

Associate Professor, Ph.D. Redin D.V.

Moscow, 2022

INDICATOR OF THE LEVEL OF FORMATION OF COMPETENCES

digital literacy					
GEF VO 38.03.02 Management					
In the process of mastering this discipline, the student forms and demonstrates the following competence:					
COMPETENCES		List of components	Competence formation technology	Assessment Tool Form**	Degrees of levels of development of competencies
INDEX	FORMULATION				
OPK-5	Able to use modern information technologies and software in solving professional problems, including the management of large data arrays and their intellectual analysis	<p>IOPC-5.1. Knows modern methods of using information technologies and software, including the management of large data sets and their intellectual analysis.</p> <p>IOPC-5.2. Able to use modern information technologies and software in solving professional problems, including the management of large data arrays and their intellectual analysis.</p> <p>IOPC-5.3. He has the skills to use modern information technologies and software tools in solving professional problems, including the management of large data arrays and their intellectual analysis.</p>	lecture, independent work, seminars	DS, T, RZZ, questions for offset	<p>A basic level of - knowledge of basic methods and means of search, systematization and processing of information;</p> <p>Enhanced level - possession of skills in applying methods and tools for searching, organizing and processing information for digital analysis of business processes.</p>

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

digital literacy					
GEF VO 38.03.02 Management					
In the process of mastering this discipline, the student forms and demonstrates the following competence:					
COMPETENCES		List of components	Competence formation technology	Assessment Tool Form**	Degrees of levels of development of competencies
INDEX	FORMULATION				
OPK-6	Able to understand the principles of operation of modern information technologies and use them to solve problems of professional activity	<p>IOPC-6.1. Knows the principles of operation of modern information technologies and the methodology of their use to solve the problems of professional activity.</p> <p>IOPC-6.2. Able to apply the principles of modern information technology to solve problems of professional activity.</p> <p>IOPC-6.3. Has the skills to use modern information technologies to solve the problems of professional activity.</p>	lecture, independent work, seminars	DS, T, RZZ, questions for offset	<p>A basic level of</p> <p>- knowledge of basic methods and means of search, systematization and processing of information;</p> <p>Enhanced level</p> <p>- possession of skills in applying methods and tools for searching, organizing and processing information for digital analysis of business processes.</p>

List of assessment tools for the discipline "Digital Literacy"

OS number	Name of the evaluation tool	Brief description of the evaluation tool	Presentation of the evaluation tool in the FOS
one	Test (T)	A system of standardized tasks that allows you to automate the procedure for measuring the level of knowledge and skills of a student.	Fund of test tasks
2	Multi-level tasks and tasks (RZZ)	Distinguish tasks and tasks: a) the reproductive level, which allow assessing and diagnosing knowledge of factual material (basic concepts, algorithms, facts) and the ability to correctly use special terms and concepts, recognition of objects of study within a certain section of the discipline; b) reconstructive level, allowing to assess and diagnose the ability to synthesize, analyze, generalize factual and theoretical material with the formulation of specific conclusions, the establishment of cause-and-effect relationships; c) creative level, allowing to evaluate and diagnose skills, integrate knowledge of various fields, argue one's own point of view.	A set of multi-level tasks and tasks
3	Report, message (DS)	Product independent work student, representing a public speech on the presentation of the results of the solution of a certain educational and practical, educational and research or scientific Topics.	Topics of reports, messages
four	offset	The final form of knowledge assessment. In higher education institutions are held during examination sessions.	Questions for offset

Questions for offset

in the discipline "Digital Literacy" formation of the competence of GPC-5, GPC-6

1. Expand the modern essence of the concepts of information, informatization, information processes, information technology (IT), information systems.
2. What is the concept of e-science?
3. What is data, what is "big data"?
4. How is data obtained in modern conditions, how do (forms of presentation) data show?
5. What are the ways to present information about data arrays?
6. Digital environment: how do search engines work?
7. How do modern spam filters work?
8. How do recommender systems work?
9. Data types and formats. Encodings. Regular expressions.
10. Open data: what is it.
11. Office technologies. Spreadsheet processors (Excel, LibreOffice, Calc, etc.) and presentation culture.
12. Database. What is structured and unstructured data?
13. Types and data objects. Principles of creating databases, main platforms.
14. Working with databases. Description of fields.
15. Data visualization. Infographics and visualization: types of views.
16. visualization tools. Visual tools MS Excel.
17. Network analysis. Graphs as a way to formalize links between elements.
18. Basic concepts of graph models. Working with the Gephi program.
19. Introduction to machine learning. Classification task, supervised learning.
20. Training markup, feature selection. Assessment and metrics.
21. cluster analysis. clustering problem. Basic approaches to cluster analysis.
22. Digitization and image analysis and computer vision.
23. State-of-the-art imaging capabilities. What determines the quality and volume of images.
24. Image formats. Special effects.
25. Neural networks. General principle of operation of neural networks.
26. Possibilities and limitations of using neural networks.
27. Futurology and Digital Humanities.
28. Cutting edge technologies. Tasks of Digital Humanities.
29. Principles of working with public service platforms.
30. Principles of information search for open data on counterparties.

**Tests in the discipline "Digital Literacy"
formation of the competence of GPC-5, GPC-6**

1. CD-ROM: a) A device for recording information on a magnetic disk b) A device for reading information from a CD + c) A device for long-term storage of information
2. What you need to provide for applying to public authorities via the Internet: a) Consent of neighbors to the processing of personal data b) Consent to the dissemination of personal data c) Consent to the processing of personal data +
3. Processor: a) Information processing device + b) Device for reading information from a magnetic disk c) Device for outputting information to paper
4. Information relating to a directly or indirectly identified or identifiable natural person: a) Commercial secret b) Information c) Personal data +
5. What is an Internet browser: a) Virus protection program b) Program for browsing websites on the Internet + c) Program for downloading files
6. Type of Internet fraud, the purpose of which is to gain access to confidential user data - logins and passwords: a) Spam b) Engineering c) Phishing +
7. What Internet browser does not exist: a) MS PowerPoint + b) Google Chrome c) Internet Explorer
8. What is installed in the apartment for wireless Internet access: a) Communicator b) Crypto gateway c) Router +
9. The search engine is NOT: a) Yandex b) FireFox + c) Rambler
10. User authentication procedure: a) Identification + b) Categorization c) Differentiation of access rights
11. What does the name of the site usually begin with: a) Yyy b) www + c) xxx
12. What is the Unified portal of state and municipal services intended for: a) Obtaining state and municipal services in electronic form + b) Obtaining

information about state and municipal institutions c) Searching for information about public services

13. A conventional word or set of characters designed to confirm identity or authority is: a) Hyperlink b) E-mail c) Password +

14. What device is needed for video calls over the Internet: a) Microphone + b) Flash drive c) Printer

15. Choose a strong password: a) master2015
b) 4i~8GvG{kB + c) 1a2s3d4f5g

16. Choose a strong password: a) 12345678 b) %FfXVMv4Du + c) qwert

17. What key combination is most often used to switch the keyboard from Russian to English and vice versa: a) Ctrl + C b) Ctrl + V c) Ctrl + Shift +

18. Mark an Internet resource that is a social network: a) Wikipedia b) Odnoklassniki + c) Yandex

19. What key combination is most often used to switch the keyboard from Russian to English and vice versa: a) Alt + Shift + b) Ctrl + C c) Ctrl + V

20. Mark the Internet resource that is a social network: a) WhatsApp b) VKontakte + c) Wikipedia

21. Which of the following programs is anti-virus: a) Microsoft Word b) Microsoft Excel c) Dr.Web +

22. What is needed for an email to reach the addressee: a) Name of the addressee b) Email address + c) Message text

23. Which of the following programs is an antivirus program: a) Mozilla b) Chrome c) Avast +

24. Can the name of the owner of the mailbox contain numbers: a) No b) Yes c) In some mail

25. Computer virus: a) A malicious program capable of infiltrating the code of other programs and distributing its copies through communication channels + b) The result of errors in the operating system c) Programs created with errors in the programming process

26. Name the living creature that is part of the user's email address: a) Cat) Snail) Dog +

27. What kind of infection can a computer get: a) Viral + b) Cold c) Intestinal

28. Unnecessary e-mails, advertising letters, etc., sent by individual companies via the Internet or e-mail: a) Fileb) Spam + c) Invitation

Criteria for evaluation:

Excellent - from 90% to 100% correct answers;

Good - from 75% to 90% correct answers;

Satisfactory - from 55% to 75% of correct answers;

Unsatisfactory - less than 55% of correct answers.

**Approximate topics of reports
in the discipline "Digital Literacy"
(formation of the competence of GPC-5, GPC-6)**

1. Can artificial intelligence replace manual processing or analysis of information?
2. Application of information technologies in the business model.
3. Why digital literacy is needed.
4. Historical excursion into information resources.

Report Evaluation Criteria

No.	Criterion	Grade			
		ex.	choir.	satisfactory	unsatisfactory
1	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	The student owns the material presented, is oriented in the	The student is not fluent enough in the material presented,	The student does not own the material presented,

		in the problem, freely answers questions	problem, finds it difficult to answer some questions	poorly oriented in the problem	poorly oriented in the problem
fo ur	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 not related to the topic.	The material presented is slightly relevant to the topic.

**Examples of multi-level tasks and assignments
in the discipline "Digital Literacy"
(formation of the competence of GPC-5, GPC-6)**

Task number 1. "Analysis of electronic resources in the activities of a manager"

Give 3 examples each and analyze the following electronic resources:

- Companion site.
- Methodological and professional associations.
- Test materials.
- Distance courses on specialized topics.
- Thematic educational projects and electronic textbooks.
- Network conferences on pedagogy.

Task number 2."Processing information in a text editor".

Conduct course work.

- Title page layout. Automatic table of contents.
- Formatting text, inserting elements (table, list, image, diagram, formula).
- Pagination.
- Bibliography.
- Text document formats.

Task number 3."Processing Information in Spreadsheets".

Information types. Absolute and relative references, Function Wizard. Mathematical, statistical and logical functions. Construction of graphs, diagrams. Calculation for the analysis of academic performance.

Task number 4."Information processing in a database management system".

Creation of tables, queries, reports, forms in the wizard and constructor. Cross query, conditional query. Creating a database of students in the classroom.

Task number 5."Development and creation of testing educational materials".

Creation and use of the test on the discipline of the training course. Types of questions, test parameters. Software complex MyTestX, Google - forms in creating tests.

Task number 6. "Creating a Personal Website"

Development, creation of a personal site in the WIX environment, site content, links, feedback. Features of using the site for business purposes.

Task number 7."Possibilities of the interactive whiteboard for multimedia learning resources".

Development of a multimedia interactive presentation on an academic discipline and demonstration of a presentation on an interactive whiteboard.

Task number 8."Interactive Distance Learning Environment". Interactive distance learning environment Moodle, personal account, electronic educational resources, features of using course elements in the educational process.

Task number 9."The hardware component of information technology in the educational process."

Determine the characteristics of the PC (hard drive size, RAM, frequency and brand of processor). Local network topology, network speed. Network addresses (physical, local, IP address). external devices. The choice of hardware for the organization of the educational process.

Task number 10."IT-Based Business Process Administration". Give examples of using information systems to support business processes.

Task number 11. "Media design in the business plan".

Development and creation, protection of a media project for a business plan.

Criteria for evaluating multi-level tasks

- Evaluation "excellent": the answer to the question of the problem is given correctly. The explanation of the course of its solution is detailed, consistent, competent, with theoretical justifications (including from the lecture course), with the necessary schematic images.

- Evaluation "good": the answer to the question of the problem is given correctly. The explanation of the course of its solution is detailed, but not logical enough, with single errors in details, some difficulties in theoretical justification (including from lecture material).

- Grade "satisfactory": the answer to the question of the problem is given correctly. The explanation of the course of its solution is not complete enough, inconsistent, with errors, weak theoretical justification (including lecture material), with significant difficulties and errors in schematic representations.

- Evaluation "unsatisfactory": the answer to the question of the task is not given correctly. The explanation of the course of its solution is given incomplete, inconsistent, with gross errors, without theoretical justification (including lecture material), without the ability to schematic images.

