FEDERAL STATE AUTONOMOUS EDUCATIONAL INSTITUTION OF HIGHER EDUCATION PEOPLES' FRIENDSHIP UNIVERSITY OF RUSSIA NAMED AFTER PATRICE LUMUMBA
RUDN UNIVERSITY

Agrarian and Technological Institute

COURSE SYLLABUS

DIGITAL LITERACY

Recommended by the Didactic Council for the Education Field of
36.05.01Veterinary Medicine

The course instruction is implemented within the professional education programme of higher education

Veterinary Medicine
(name (profile/specialization))

2025

1. COURSE GOALS

The goal of the discipline "Digital Literacy" is the study of information processes occurring in society, methods and means of obtaining, transforming, transmitting, storing and using information related to the use of information technologies.

2. LEARNING OUTCOMES

Studying the discipline "Digital Literacy" is aimed at the formation of the following competencies (part of competencies) among students:

Table 2.1. List of competencies formed in students when studying the discipline (results of mastering the discipline)

Competence code	Competence	Competence indicators
GC-1	Able to search, critically analyze and synthesize of information, apply a systematic approach to solve tasks	GC -1.1 Know how to search information to solve the task for various types of requests
		GC -1.2. Able to analyze and contextually process information to solve tasks with the formation of their own opinions and judgments
		GC -1.3 Able to offer options for solving the problem, analyze the possible consequences of their use
GC-12	Able to: search for the necessary sources of information and data, perceive, analyze, memorize and transmit information using digital means, as well as using algorithms when working with data received from various sources in order to effectively use the information received to solve problems; evaluate information, its reliability, build logical conclusions based on incoming information and data	GC -12.1 Know how to search for the necessary sources of information and data, perceive, analyze, memorize and transmit information using digital means, as well as using algorithms when working with data received from various sources in order to effectively use the information received to solve problems
		GC -12.2 Able to evaluate information, its reliability, build logical conclusions based on incoming information and data
GPC-5	Able to understand the principles of operation of modern information technologies and use them to solve problems of professional activity	GPC-5.1 Know how to use modern information technologies and software, incl. domestic production, to solve the problems of the digital economy
		GPC-5.2 Recognize and takes into account the sources of threats, compliance with information security requirements
		GPC-5.3 Able to choose modern information technologies and software in solving problems of professional activity

3. COURSE IN HIGHER EDUCATION PROGRAMME STRUCTURE

The discipline "Digital Literacy" refers to the part formed by the participants of the educational relations of block B1 of the EP.

Within the framework of the EP, students also master other disciplines and / or practices that contribute to the achievement of the planned results of mastering the discipline "Digital Literacy".

Table 3.1. List of Higher Education Programme components / disciplines that contribute to expected learning/training outcomes

Code	Competence	Previous disciplines/modules, practices*	Subsequent disciplines/modules, practices*
GC-1	Able to search, critically analyze and synthesize of information,	-	Mathematics (part 1) Mathematics (part 2) Microeconomics
Code	**Competence**	**Previous disciplines/modules,**	**Subsequent disciplines/modules,**

		practices*	practices*
	apply a systematic approach to solve tasks		Macroeconomics Institutional economy World economy International economic relations Statistics Economical geography Economic and mathematical modeling Economics of interstate territorial disputes History of financial turmoil in the global economy Creativity and innovation in business Fundamentals of Scientific Research Business climate and regulation of foreign investment in the Russian Federation Technological revolutions and economic growth Corporate Fraud Audit Basics Emotional intelligence Cities in the global economy Modern financial transactions Ecosystems in business Neuromarketing Introductory internship Technological internship Project-technological internship Undergraduate practice Final state examination procedures Degree thesis procedures
GC -12	Able to: search for the necessary sources of information and data, perceive, analyze, memorize and transmit information using digital means, as well as using algorithms when working with data received from various sources in order to effectively use the information received to solve problems; evaluate information, its reliability, build logical conclusions based on incoming information and data	-	Econometrics "Project analysis" (part 2) Introduction to the digitalization of business process accounting Skills and technologies of public presentations Data storytelling Fundamentals of trading in the stock market Creativity and innovation in business Fundamentals of Scientific Research insurance business Modern financial transactions Digital technologies in management Fundamentals of financial forecasting "Smart cities": Russia and the world Design thinking Business on the Internet Digital banking The Economics of Digital Markets Project-technological internship Undergraduate practice Final state examination procedures Degree thesis procedures
GPC-5	Able to understand the principles of operation of modern information	-	Economic and mathematical modeling

Code	Competence	Previous disciplines/modules, practices*	Subsequent disciplines/modules, practices*
	technologies and use them to solve problems of professional activity		Introduction to the digitalization of business process accounting Skills and technologies of public presentations Data storytelling Training: working with international statistics Emotional intelligence Big Data: basics of data analysis Digital technologies in management Ecosystems in business Neuromarketing Business Process Modeling Global war for consumers in global commodity markets "Smart cities": Russia and the world Personal branding Business on the Internet Phygital technologies in economics Geographic Information Systems: Visualization of Spatial Data The Economics of Digital Markets Undergraduate practice Final state examination procedures Degree thesis procedures

4. COURSE WORKLOAD AND LEARNING ACTIVITIES

The total laboriousness of the discipline "Digital Literacy" is 4 credit units.

TABLE 4.1. Types of academic activities during the period of ***the HE programme mastering***

Type of educational work		TOTAL, *academic hours*	Semester	
			1	**2**
Contact academic hours		*34*	*34*	
including:				
Lectures				
Lab work		34	34	
Seminars (workshops/tutorials)				
Self-study (ies), academic hours		*92*	*92*	
Evaluation and assessment academic hours		*18*	*18*	
Overall laboriousness of the discipline	*academic hours*	**144**	***144***	
	credit units	**4**	**4**	

5. COURSE MODULES AND CONTENTS

Table 5.1. The content of the discipline (module) by types of educational work.

Course Modules and Contents	Modules and Topics (Units/Themes)	Type of educational work *
Section 1. Information,	Topic 1.1. The concept of informatics and the information society. Information and its properties	LR
	Topic 1.2. Measures and units of representation, measurement and storage of information. Number systems. Fundamentals of	LR

Course Modules and Contents	Modules and Topics (Units/Themes)	Type of educational work *
Informatics, Information Technologies	Algebra Logic.	
	Topic 1.3. Technical basis of information technologies. Personal computer. Pc core units.	LR
	Topic 1.4. Computer Software Structure	LR
	Topic 1.5. Understanding the Operating System and Operating Environment	LR
Section 2. Microsoft Office.	Topic 2.1. General information about Microsoft Office.	LR
	Topic 2.2. Microsoft Word Text Editor	LR
	Topic 2.3. PowerPoint Basics	LR
Section 3. Computer networks and the Internet	Topic 3.1. Computer Networks	LR
	Topic 3.2. Essential Internet Services	LR
	Topic 3.3. Internet Security	LR
Section 4. Legal Help Systems	Topic 4.1. Basics of working with legal help systems	LR
Section 5: Creating Spreadsheets	Topic 5.1. Create spreadsheets	LR
	Topic 5.2. Calculations Cell names Relative and absolute references.	LR
	Topic 5.3: Formats: Custom format. Data validation.	LR
Section 6. Calculation, processing and analysis of data.	Тема 6.1. Условное форматирование. Имена диапазонов	LR
	Topic 6.2. Calculations. Trigonometric functions.	LR
	Topic 6.3. Special insert. Rounding functions. Arrays. Matrices	LR

* - is filled only in the **full-time** form of training: LC - lectures; LR - laboratory work; SC - seminar classes

6. CLASSROOM EQUIPMENT AND TECHNOLOGY SUPPORT REQUIREMENTS

Table 6.1. Logistics of discipline

Name of special placements and placements for independent work	Equipment of special placements and placements for independent work	List of licensed software. Details of the confirming document
Lecture Hall	Auditorium for conducting lecture-type classes, equipped with a set of specialized furniture; whiteboard (screen) and technical means of multimedia presentations.	Windows, Microsoft Office, 7 Zip archiver.
Computer Lab	Computer class for conducting classes, group and individual consultations, current control and intermediate certification, equipped with personal computers (in the amount of 21 pieces), a whiteboard (screen) and technical means of multimedia presentations.	Windows, Microsoft Office, 7 Zip archiver, Garant System, Consultant plus
For independent work of students	Auditorium for independent work of students (can be used for seminars and consultations), equipped with a set of specialized furniture and computers with access to the EIOS.	Computer with Internet access

7. RESOURCES RECOMMENDED FOR COURSE STUDY

Main reading(sources)

1. Johannes Glückler, Robert Panitz. Knowledge and Digital Technology – Springer, 2024. – 299 p. URL: https://freecomputerbooks.com/Knowledge-and-Digital-Technology.html

2. Ernie Dainow. Understanding Computers, Smartphones and the Internet – CreateSpace, 2018. – 80 p. URL: https://freecomputerbooks.com/Understanding-Computers-Smartphones-and-the-Internet.html

Additional (optional) reading (sources)

1. Computer Science. Digital Literacy: a tutorial / S. Yu. Revinova, M. M. Eyeberdyeva. - Electronic text data. - Moscow: RUDN, 2024. - 135 p. URL: https://mega.rudn.ru/MegaPro/UserEntry?Action=Link_FindDoc&id=517532&idb=0

2. Computer science. In 2 volumes. Textbook for High Schools / Ed. Trofimova V.V. - 3rd ed. revised and additional - Moscow: Yurayt Publishing House, 2021. - 406 p. Electronic access: https://urait.ru/viewer/informatika-v-2-t-tom-2-470745#page/2

Resources of the information and telecommunications network "Internet":

1. RUDN ELS and third-party ELS, to which university students have access on the basis of concluded agreements:
- RUDN Electronic Library System - RUDN EBS http://lib.rudn.ru/MegaPro/Web
- ELS "University Library Online" http://www.biblioclub.ru
- EBS Yurayt http://www.biblio-online.ru
- ELS "Student Consultant" www.studentlibrary.ru
- EBS "Lan" http://e.lanbook.com/
- EBS "Trinity Bridge"

2. Databases and search engines:
- electronic fund of legal and normative-technical documentation http://docs.cntd.ru/
- Yandex search engine https://www.yandex.ru/
- Google search engine https://www.google.ru/
- abstract database SCOPUS http://www.elsevierscience.ru/products/scopus/

Educational and methodical materials for independent work of students when mastering the discipline / module *:

1. A course of lectures on the discipline "Digital Literacy".
2. Laboratory workshop on the discipline "Digital Literacy"

* - all educational and methodological materials for independent work of students are placed in accordance with the current procedure on the page of **the discipline in Telecommunication systems**!

8. ASSESSMENT TOOLKIT AND GRADING SYSTEM* FOR EVALUATION OF STUDENTS' COMPETENCES LEVEL UPON COURSE COMPLETION

Evaluation materials and a grading system* for assessing the level of formation of competencies (part of competencies) based on the results of mastering the discipline "Digital Literacy" are presented in the Appendix to this Course Syllabus of the discipline.

DEVELOPERS:

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