PJSC "Higher Education Institution "INTERREGIONAL ACADEMY OF PERSONNEL MANAGEMENT"

Approved:
Name of the department
Minute No. _ dated "_" _____ 2025

Head of the department
_____
(signature)
(full name)

SYLLABUS
of the academic discipline

INFORMATION SYSTEMS AND TECHNOLOGIES

Specialty: C4 Psychology
(code and name of specialty)

Educational level: first (bachelor's) level
(name of educational level)

Study program: Psychology
(name of educational program)

2025

General information about the academic discipline

Name of the academic discipline	Information Systems and Technologies
Code(s) and name(s) of the specialty(s)	C4 Psychology
Level of higher education	first (bachelor's) level of higher education
Status of the discipline	compulsory
Number of credits and hours	4 credits / 120 hours, Lectures: 20 hours, Seminars / practical classes: 32 hours
Language of instruction	Ukrainian
Type of final control	Pass/fail (credit)

General information about the instructor. Contact information.

Full name of the instructor	
Academic degree	
Position	
Areas of scientific research	
Links to the registers of identifiers for scientists	
Contact information	
E-mail:	
Department phone	
Instructor’s portfolio on the website	

Course abstract. The course explores the use of modern information systems and digital technologies in psychological practice, research, education, and professional communication. Students learn to apply office tools, spreadsheet and database systems, and data visualization instruments to support experimental work, diagnostics, and decision-making. Special attention is given to online and network resources, interactive and multimedia technologies, mobile applications for psychological support, and ethical aspects of digital data management. The course develops practical skills for organizing information, presenting professional results, and using ICT tools effectively in the project and consulting activities of a psychologist.

The subject of the discipline "Information Systems and Technologies" is the study of the principles, methods and means of using computer equipment and information technologies to create, collect, process, store, transmit and disseminate information in order to ensure effective activity. It covers a wide range of issues related to the development, implementation and operation of information systems and technologies in various fields, in particular, in the field of psychology.

Course Objective: 1. Develop an understanding of the role and functions of information systems and digital technologies in the professional activities of a psychologist. 2. Form practical skills in using office software, spreadsheet tools, and database management systems for organizing, processing, and analyzing psychological data. 3. Strengthen the ability to apply network technologies, online resources, and interactive digital platforms in psychological practice, research, and communication. 4. Enhance competencies in data visualization, multimedia tools, and mobile applications for diagnostics, counseling, and educational activities.

Objectives of the academic discipline: study of modern concepts, issues of building and implementing information systems that provide collection and processing of information essential for making management decisions at different levels of the organization's activity processes.

Prerequisites: The course "Information Systems and Technologies" is studied in the 3rd semester of the second year, has interdisciplinary connections with the disciplines "Informatics", "Computer Networks", but within the framework of the educational program C4 Psychology, to study the discipline "Information Systems and Technologies" it is necessary to acquire knowledge, skills and abilities of the academic discipline "Information Systems and Technologies". Postrequisites: disciplines "Organization of the Activities of Psychological Services", "Fundamentals of Psychological Practice (Practical Psychology)", since the field of activity of a psychologist is covered by the processes of informatization and computerization, the educational training of psychologists requires knowledge, skills and abilities in the application of modern information systems and technologies.

Program competencies and learning outcomes:

General Competencies (GC)	GC1. Ability to apply knowledge in practical situations. GC3. Skills in using information and communication technologies. GC4. Ability to learn and master modern knowledge.

	GC5. Ability to be critical and self-critical. GC6. Ability to make informed decisions. GC7. Ability to generate new ideas (creativity). GC8. Interpersonal skills. GC9. Ability to work in a team.
Specific (Professional) Competencies (SC)	SC8. Ability to analyze and systematize the results obtained, formulate reasoned conclusions and recommendations. SC10. Understanding the patterns of interaction between individuals, social groups, and communities. SC20. Ability for personal and professional self-improvement, learning, and self-development.
Program learning outcomes	
Program learning outcomes (PLO)	PLO3 Search for information from various sources, including using information and communication technologies, to solve professional tasks. PLO4 Justify one's own position, draw independent conclusions based on the results of one's own research and analysis of literary sources. PLO8 Present the results of one's own research orally / in writing for specialists and non-specialists. PLO10 Formulate an opinion logically, understandably, discuss, defend one's own position, modify statements in accordance with the cultural characteristics of the interlocutor. PLO13 Interact, enter into communication, be understandable, be tolerant of people with other cultural or gender-age differences. PLO14 Effectively perform various roles in a team in the process of solving professional tasks, including demonstrating leadership qualities. PLO15 Be responsible for professional self-improvement, training and self-development.

Content of the academic discipline:

№	Topic name	Number of hours, of which:			
		Lectures	Practical classes	Independent work	**Teaching methods/assessment methods**
Content module 1. The role and place of information systems and technologies in the professional activities of a psychologist.					**Teaching methods:** verbal (teaching lecture; conversation;

Topic 1	Information systems in the professional activities of a psychologist.	2	2	6	educational discussion); inductive method; deductive method; practical; explanatory-illustrative; reproductive; problem-based presentation method; research; interactive methods; case method. **Assessment methods:** oral control (oral survey, assessment of participation in discussions); written control (control, independent work, essays); test control (closed-form tests: test-alternative, test-correspondence); method of self-control.
Topic 2	Information technologies in the professional activities of a psychologist.	2	2	6	
Topic 3	Network technologies and Internet resources in the professional activities of a psychologist.	2	4	8	
Modular test work					
Content module 2. Office systems and technologies in the professional activities of a psychologist .					
Topic 4.	Information systems and technologies for organizing and processing text data.	2	4	6	
Topic 5.	Information systems and technologies for using spreadsheet tools in the experimental and research activities of a psychologist.	2	4	6	
Topic 6.	The role and place of database management systems in the professional activities of a psychologist.	2	4	8	
Modular test work					
Content module 3. The role and place of graphic, multimedia and interactive technologies in the professional activities of a psychologist.					
Topic 7.	Data visualization, its purpose and impact. The role and place of business graphics in the professional activity of a psychologist.	2	4	6	
Topic 8.	Interactive technologies in the professional activity of a psychologist.	2	4	8	
Modular test work					
Content module 4. Information and communication technologies in the project activities of a psychologist .					
Topic 9.	The use of mobile applications in the practical activities of a psychologist.	2	2	6	

Topic 10.	Self-presentation of a psychologist using information technology.	2	2	8	
Modular test work					
Total :		**20**	**32**	**68**	
Form of control: credit					

Technical equipment and/or software – official website of MAUP:

http://maup.com.ua The educational process uses classrooms, a library, a multimedia projector and a computer for conducting lectures and seminars with presentation elements. Studying individual topics and completing practical tasks requires access to information from the World Wide Web, which is provided by a free Wi-Fi network.

Forms and methods of control.

Control of the success of students is divided into ongoing and final (semester).

Ongoing control is carried out during practical (seminar) classes, the purpose of which is to systematically check the understanding and assimilation of theoretical educational material, the ability to use theoretical knowledge when performing practical tasks, etc. The possibilities of ongoing control are extremely wide: motivation for learning, stimulation of educational and cognitive activity, a differentiated approach to learning, individualization of learning, etc.

Forms of student participation in the educational process that are subject to ongoing control:

-oral report;
- additions, questions to the person answering;
- systematic work in seminar classes, activity during the discussion of issues;
- participation in discussions, interactive forms of organizing classes;
- analysis of legislation and monographic literature;
- written tasks (tests, tests, creative works, essays, etc.);
- preparation of theses, summaries of educational or scientific texts;
- independent study of topics;
- Control of the success of students is divided into ongoing and final.

- **Methods of ongoing control:** oral control (survey, conversation, report, message, etc.); written control (test work, essay, presentation of material on a given topic in writing, etc.); combined control; presentation of independent work; observation as a control method; test control; problem situations.

Grading system and requirements.

Table of distribution of points received by students

	Ongoing knowledge control	Modular tests	Final assessmen	Total point

												t	s
Topics	Topic1	Topic2	Topic3	Topic4	Topic5	Topic6	Topic7	Topic8	Topic9	Topic10	20	20	100
Work in a seminar session	3	3	3	3	3	3	3	3	3	3			
Independent work	3	3	3	3	3	3	3	3	3	3			

The table contains information about the maximum points for each type of academic work of a student.

When assessing the mastery of each topic for the current educational activity, the student is given marks taking into account the approved assessment criteria for the relevant discipline.

The criteria for assessing the learning outcomes of students and the distribution of points they receive are regulated by the Regulations on the assessment of academic achievements of students at PJSC "HEI "MAUP".

Modular control. Modular control work on the academic discipline "Information Systems and Technologies" is carried out in written form, in the form of testing, namely, closed-form tests: test-alternative, test-correspondence.

Criteria for evaluating the modular test work in the academic discipline "Information Systems and Technologies":

When evaluating the modular test work, the volume and correctness of the completed tasks are taken into account:

- the grade "excellent" (A) is given for the correct completion of all tasks (or more than 90% of all tasks);
- the grade "good" (B) is given for the completion of 80% of all tasks;
- the grade "good" (C) is given for the completion of 70% of all tasks;
- the grade "satisfactory" (D) is given if 60% of the proposed tasks are completed correctly;
- the grade "satisfactory" (E) is given if more than 50% of the proposed tasks are completed correctly;
- the grade "unsatisfactory" (FX) is given if less than 50% of the tasks are completed.

Absence from the modular test work - 0 points.

The above grades are transformed into rating points as follows:

"A" - 18-20 points;
"B" - 16-17 points;
"C" - 14-15 points;
"D" - 12-13 points.
"E" - 10-11 points;

"FX" - less than 10 points.

The final semester control in the academic discipline "Information Systems and Technologies " is a mandatory form of assessing the learning outcomes of a student. It is carried out within the time limits established by the educational process schedule and in the volume of educational material determined by the program of the academic discipline.

The final control is carried out in the form of a test (oral). The student is admitted to the semester control provided that he performs all types of work.

Semester control in the form of a test provides that the final grade for the discipline is determined as the sum (simple or weighted) of points for content modules. The final grage is issued based on the results of the student's work throughout the semester. The rating score of the student consists of the points received by the student based on the results of ongoing control measures, incentive points.

Students who have fulfilled all the tasks and have a rating score of 60 or more points receive a grade corresponding to the rating received without additional tests.

With students who have fulfilled all the tasks and have a rating score of less than 60 points, as well as with those students who wish to increase their rating score, the professor conducts a final semester control in the form of a test at the last scheduled lesson in the discipline in the semester.

Assessment of additional (individual) types of educational activities. Additional (individual) types of educational activities include the participation of applicants in scientific conferences, scientific societies and problem groups, preparation of publications, etc. in excess of the tasks established by the relevant syllabus of the academic discipline.

By decision of the department, applicants who participated in scientific research work and performed certain types of additional (individual) types of educational activities may be awarded incentive (bonus) points for a certain educational component.

Incentive points are not normative and are not included in the table of distribution of points received by students and the main scale of the assessment system.

One event can be the basis for setting incentive points only for one most relevant educational component.

The total number of points scored by students for completing tasks for independent work is one of the components of the academic performance in the academic discipline. Independent work on each topic according to the work program of the academic discipline is evaluated in the range from 0 to 3 points using standardized generalized knowledge assessment criteria.

Scale for evaluating the performance of independent work (individual tasks)

	Execution level

The maximum possible assessment of independent work (individual tasks)	Excellent	Good	Satisfactory	Unsatisfactory
3	3	2	1	0

Forms of control: ongoing control based on the performance of practical work; ongoing control of knowledge acquisition based on the assessment of oral answers to questions, messages, reports, etc. (in practical (seminar) classes); individual or collective project that requires the formation of practical skills and abilities of students (selective form); solving situational tasks; a summary made on the topic studied independently; testing, performing a written test; draft articles, speech abstracts and other publications, other forms that contribute to the full assimilation of the educational program and the consistent development of skills for effective independent professional (practical and scientific and theoretical) activity at a high level.

To assess the learning outcomes of a student during the semester, a 100-point, national and ECTS assessment scale is used

Summary assessment scale: national and ECTS

Total points for all types of learning activities	ECTS assessment	National scale assessment for exam, course project (work), practice	
		National scale assessment for exam, course project (work), practice	For pass/fail (credit)
90 – 100	A	excellent	pass
82 – 89	B	good	
75 – 81	C		
68 – 74	D	satisfactory	
60 – 67	E		
35 – 59	FX	unsatisfactory with the possibility of retaking	fail unsatisfactory with the possibility of retaking
0 – 34	F	unsatisfactory with mandatory re-study of the discipline	fail unsatisfactory with mandatory re-study of the discipline

Course Policy.

- regularly attend lectures and practical classes;
- work systematically and actively in lectures and practical classes;
- catch-up on missed classes;
- perform the tasks required by the syllabus in full and with appropriate quality;
- perform control and other independent work;
- adhere to the norms of academic behavior and ethics.

The course "Information Systems and Technologies" involves mastering and adhering to the principles of ethics and academic integrity, in particular, orientation on preventing plagiarism in any of its manifestations: all works, reports, essays, abstracts and presentations must be original and author's, not overloaded with quotes, which must be accompanied by references to primary sources. Violations of academic integrity are considered: academic plagiarism, self-plagiarism, fabrication, falsification, copying, deception, bribery, biased evaluation.

The assessment of the student is focused on receiving points for activity in seminar classes, completing tasks for independent work, as well as completing tasks that can develop practical skills and abilities, for which additional (bonus) points can be awarded (participation in round tables, scientific conferences, scientific competitions among students).

Methodological support of the academic discipline

Teaching and methodological materials that provide support for the discipline: lecture notes, methodological recommendations for conducting practical (seminar) classes and methodological recommendations for independent work of higher education students in the academic discipline "Information Systems and Technologies".

Recommended sources and literature:

Main:

1. Butenko T.A., Syry V.M. Information Systems and Technologies: a textbook. Kh.: KhNAU named after V.V. Dokuchaev, 2020. 207 p.

2. Gulak G.M., Zhiltsov O.B. Information and cyber security of the enterprise. Lviv: Publishing house PP "Magnolia 2006", 2023. 370 p.

3. Informatics. Computer technology. Computer technologies: textbook / Ed. V.A. Bazhenov, G.A. Shynkarenko. Kyiv: Karavela, 2023. 496 p.

4. Novak V.O. Information systems in management: textbook. Kyiv: Karavela, 2023. 536 p.

5. Sazonets O.M. Information systems and technologies in the management of foreign economic activities. Kyiv: Center for Educational Literature, 2017. 256 p.

Additional:

1. Antonenko V.M., Mamchenko S.D., Rogushyna Yu.V. Modern information systems and technologies: knowledge management: textbook. Irpin: National University of State Tax Service of Ukraine, 2016. 212 p.

2. Vasyliv V.B. Information systems for personnel management: textbook. Rivne: National University of State Tax Service of Ukraine, 2014. 148 p.

3. Galich.O.A., Kopishynska O.P., Utkin Y.V. Management of information communications and business processes: textbook. Kharkiv: Finart, 2016. 244 p.

4. Dobrovolska L.O., Cherevko O.O. Information systems in industry: textbook. Mariupol: PDTU, 2014. 238 p.

5. Information systems and technologies: textbook / P.M. Pavlenko et al. K.: NAU, 2013. 324p.

6. Sazonets O.M. Information systems and technologies in the management of foreign economic activity. K.: Center for Educational Literature, 2017. 256 p.

7. Modern information technologies and systems in management: collection of materials of the I All-Ukrainian scientific and practical conference of young scientists, postgraduates, students April 6-7, 2017. K.: KNEU, 2017. 213 p.

Internet - resources:

1. International library and information center named after Yaroslav the Wise of the Interregional Academy of Personnel Management. URL: https:// library.maup.com.ua

2. Kharkiv State Scientific Library named after V. G. Korolenko. URL: http:// korolenko. kharkov.com

3. Kharkiv Regional Universal Scientific Library. URL: http://library.kharkov.ua