

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

Lviv State University of Physical Culture named after Ivan Boberskyj

Department of Computer Science and kinesiology



WORKING PROGRAM OF EDUCATIONAL DISCIPLINE

## **Computer and information technologies**

field of knowledge 02 Culture and art  
specialty: 024 Choreography  
Faculty of Postgraduate and Distance Education

Second degree of higher education (master's)

**Lviv 2022**

Work program in the discipline "Computer and information technologies" for students of the specialty 024 Choreography

Developer: Ilkiv O., Ph.D., associate professor of the Department of Informatics and Kinesiology

The program was approved at the meeting of the Department of Computer Science and Kinesiology

Protocol *September* 2022\_ No. *2*

Head of the department \_\_\_\_\_ (I. Zanevsky)

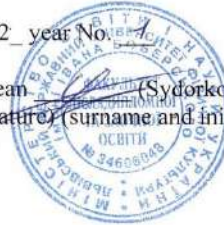
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*" 22 "* *September* \_\_\_\_\_ 2022\_ year

Approved by the Council of the Faculty of Postgraduate and Distance Education

Minutes of *" 22 "* *09* \_\_\_\_\_ 2022\_ year No. *1*

*" 22 "* *09* \_\_\_\_\_ 2022\_ year Dean \_\_\_\_\_ (Sydorko O.)  
(signature) (surname and initials)



*Koim i lmas takun*

## 1. Description of the academic discipline

Name of indicators	Field of knowledge, direction of training, educational and qualification level	Characteristics of the academic discipline	
		full-time studding	part-time studding
Number of credits – 3	Branch of knowledge 02 Culture and art	Normative	
	Specialty 024 Choreography		
Modules - 1	Specialty (professional direction): choreography	<b>Year</b>	
Content modules – 2		1	1
Course work - none		<b>Semester</b>	
The total number full-time studding of hours is 90 hours.		1	1
The total number part-time studding of hours is 60 hours.		<b>Lectures</b>	
Weekly hours for full-time studding: classrooms - 4 student's independent work – 3 Weekly hours for part-time studding: classrooms - 1 student's independent work – 3	Level of higher education Second (master's)	10 hours	6 hour
		<b>Laboratory</b>	
		20 hours	10 hour
		Individual tasks:	
		15 hour	15 hour
		<b>Independent work</b>	
		45 hours	59 hour
		Type of control: credit	

**Note.**

The ratio of the number of classroom hours to independent and individual work is:

for full-time studding – 30/60 (0.5);

for part-time studding – 16/74 (0.2)

## **2. The purpose and tasks of the educational discipline**

The purpose of teaching the discipline: acquisition of professional knowledge, skills, skills in working with computer and information technologies, which will provide theoretical and practical training of highly qualified specialists capable of constant updating of knowledge, professional skills, mobile and rapid adaptation to changes in the system of physical culture and sports (FC and S), in particular in the field of culture and art (CA).

### **The task of teaching the discipline:**

- to form an understanding of the role of computer and information technologies in FC and S, in particular in the sphere of culture and art and personal training for professional activity, motivational and value attitude to the study of the information sphere;
- familiarize students with the most common types of information technologies used in physical culture and sports, the basics of using specialized computer programs, as well as the specifics of using information technologies in choreography;
- to form professional skills and abilities to solve the tasks of applying information technology in CA;
- positively influence the development of students' creative abilities and their further professional orientation.

### **According to the requirements of the educational and professional program, students must:**

- know the place of computer and information technologies in the system of FC and S; the current state and development trends of the informatization of the CA sphere; basics of applications of various information technologies in choreography; features of CA software; basic rules for using the Internet;
- be able to apply Internet technologies in FC and C, CA; use Internet search engines; use office technologies for information processing;
- have competence in information processing skills by means of information and communication technologies sufficient for a PC user.

## **3. Program of academic discipline**

### **Content module 1: Internet technologies in the field of FC and S, CA.**

**Topic 1. Computer and information technologies in the educational process.** Modern means of information protection. Solutions to system and network security problems. Trends in the development of hardware and software. Convergence of information and telecommunication technologies. Cloud technologies. Artificial intelligence systems. Neural networks. Types of information security threats in computer systems. Modern software means of information protection, cryptography algorithms, means of identification and authentication of users. Legislative support for information protection issues.

**Topic 2. Use of the Internet and automated information and search systems to ensure the activity of a choreography specialist.**

Information resources of the Internet: modern network services, navigation on the Internet, information search system. Types of search engines: thematic and index. Rating of the main world search engines. Software components of index search systems. Information resources of electronic databases of scientific periodicals.

### **Content module II: Application software application**

**in the activities of FC and S specialists, in particular culture and art.**

**Topic 3. Applied software for processing materials of master's theses. Use of MS Word word processor.** Peculiarities of using information office technologies in choreography. Word word processor technologies. Technologies: creation and formatting of documents; creation of graphic special



<b>Total with module 1</b>	<b>30</b>	<b>4</b>		<b>4</b>	<b>8</b>	<b>14</b>	<b>32</b>	<b>2</b>		<b>2</b>	<b>8</b>	<b>20</b>
<b>Module 2</b>												
<b>Content module 2. The use of application software in the activities of FC and S specialists, in particular culture and art.</b>												
Topic 3. Software for processing materials of master's theses. Application of t. r.. MS Word.	18	2		6	2	8	12	2		2	2	15
Topic. 4. Application of the table. Excel processor, DBMS Access technologies, PowerPoint technologies.	26	2		6	3	15	21	1		5	3	15
Topic 5. Application of Web-technologies in the practical activity specialist.	16	2		4	2	8	9	1		1	2	9
<b>Total with module 2</b>	<b>60</b>	<b>6</b>		<b>16</b>	<b>7</b>	<b>31</b>	<b>58</b>	<b>4</b>		<b>8</b>	<b>7</b>	<b>39</b>
<b>Total</b>	<b>90</b>	<b>10</b>		<b>20</b>	<b>15</b>	<b>45</b>	<b>90</b>	<b>6</b>		<b>10</b>	<b>15</b>	<b>59</b>

### 6. Topics of laboratory classes

№	Topic	hour	
		Full-time	Part-time
1	Information resources of scientific periodicals. Internet search engines. Sports-related sites. Information resources in the field of FC and S, CA.	2	1
2	Web page creation technologies. Email technologies.	2	1
3	Formatting and design of master's theses using Word. Work on creating the content of the document and the list of references.	4	2
4	Application of word processor Word. Creation of tables, formulas, diagrams, graphs.	2	2
5	Use of Excel spreadsheet.	2	
6	Mathematical and statistical processing of the results of scientific research using electronic spreadsheet processors.	2	1
7	Application of DBMS Access technologies.	2	
8	Application of technologies for building PowerPoint presentations	2	2



15	15	15	45		20	20	15	55	
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T1, T2 ... – topics.

### Conformity of the final semester rating in points National Scale and ECTS Scale

Score in points	Rating	Score on a national scale	
		for an exam, course project (work), practice	for credit
90 – 100	<b>A</b>	Perfectly	Satisfactorily
82-89	<b>B</b>	Okay	
74-81	<b>C</b>		
64-73	<b>D</b>	Satisfactorily	
60-63	<b>E</b>		
35-59	<b>FX</b>	Unsatisfactory (with the possibility of re-assembly)	Unsatisfactory (with the possibility of re-assembly)
0-34	<b>F</b>	Unsatisfactory (with obligatory repeated course)	Unsatisfactory (with obligatory repeated course)

### 13. Methodological support

Test tasks, methodical recommendations for essay writing, study guides.

### 14. Recommended literature

#### Main:

1. Ilkiv O.S. Matviev V.I. Informatics and computer technology (with elements of mathematical statistics): teaching. manual – Lviv: LDUFK. 2010.
2. U.B. Yarka, T.M. Biluschak Informatics and computer technology. Education manual – Lviv: Lviv Polytechnic, 2015.
3. E.M. Nuzhnyi, I.V. Klymenko, O.O. Akimov Electronic office tools. -K: center of education li-ry, 2017.
4. Zanevskiy I.P., Zanevska L.G. Computer and information technologies in active recreation and sports and health tourism: training. manual for masters of physics education. - L.: LDUFK, 2010. - 167 p.
5. Buynytska O.P. Information technologies and technical means of education: teaching. manual for students higher education institutions/ MONU; Kyiv University named after Boris Grinchenko. - K.: Center for Educational Literature, 2012 - 240 p.
6. Skopenia M.M. Workshop on the discipline "Informatics and computer technology" / M.M. Skopje; Answer for the release of L.F. Marakhovsky - K.: KITEP, 2000. - 172 p.
7. Zaitseva T.Y., Smirnova O.Yu. In coll.: Information technologies in education. - M., 2000. -342 p.

#### Additional literature:

1. 1. Glushakov S.V., Lomotko D.V., Suryadny A.S. Work on the Internet/ 2nd ed., add. and reworked/ Artist-designer A.S. Yuchtman. - Kharkiv: Folio, 2003. - (Training course)



2. 2. Computer networks. Principles, technologies, protocols: Textbook for universities. 2nd ed. / V.G. Olifer, N.A. Olifer - St. Petersburg. Peter, 2004. – 864 p.
3. 3. Lytvyn I. I., Kononchuk O. M., Deshchynskyi Yu. L. Informatics: theoretical foundations and practicum: a textbook for students of higher education. institutions - Lviv: Novy svit, 2010. -304 p.
4. 4. Maihrych Ya. I. Your computer teacher. 4th edition, revised and supplemented - Lviv: SPD Maihrych Y.I., 2011. - 446 p., illustrations.
5. 5. Rubin A.A., Kleandrova I.A., Prokdy R.G. etc. Self-tutor Access 2007. 100% result of confident work - St. Petersburg: Nauka i Tehnika, 2008. - 400 p.: ill.
6. Simonovych S.V. Effective work: MS Word 2007. - St. Petersburg: Peter, 2008. - 640 p.: illustrations.
7. Chapovska R., Waldrat O. Working with Microsoft Excel: training. manual – Chernivtsi: Books - XXI, 2006. – 253 p.

#### **15. Information resources:**

1. [http://ebooktime.net/book\\_82.html](http://ebooktime.net/book_82.html)
2. <http://technologies.su/>

#### **15. Information resources**

Presentations of educational material by means of multimedia, electronic manuals.

Means of diagnostics of learning success. The modular rating system of knowledge assessment provides for a 100-point scale, i.e. 100 points is the maximum number of points that a student can receive for academic success in the process of studying the subject for the above credit amount.