ОЙТÚSTIK-QAZAQSTAN MEDISINA АКАДЕМІАSY «Оңтүстік Қазақстан медицина академиясы» АҚ	цинская академия»
Department of "Medical Biophysics and Information Technology"	044-35/09 ( )
Syllabus on the subject "Information and communication technology"	1 page out of 24

# Department «Medical Biophysics and Information Technology» Subject educational work program (Syllabus) Educational program 6B10106 «Pharmacy»

1.	General inf	ormati	on about the	Course					
1.1	Course code	: ICT 1	105			1.6	1.6 Academic year: 2023-20		
1.2	Course name	e: Infor	mation and co	on and communication Ye			Year:	1	
	technology					1./			
1.3	Prerequisites	s: -				1.8	Term:	1	
1.4	Post-requisit	tes: Bic	physics			1.9	Numb	er of cred	its (ECTS): 5
1.5	Cycle: gener	ral educ	cation discipli	ne		1.10	Comp	onent: ma	in component
2.	Course desc	cription	n						
	An ICT role	in key	sectors of de	velopment of s	ociety. In	troducti	on to con	mputer sy	stems. Software.
Oper	ating systems.	Huma	an-computer	interaction. Da	tabase sy	ystems.	Data ana	alysis. Da	ata management.
Netw	orks and tel	ecomm	unications. (	Cybersecurity.	Internet	techno	logy. Cl	oud, mo	bile technology.
Mult	imedia, SMA	RT tec	chnology. E-t	echnology. Int	formation	techno	ology in	the prof	fessional sphere.
Indus	strial ICT. Pros	spects of	of development	nt of ICT.					
3.	Summative	assess	ment form						
3.1	Testing 🔽				3.5	C	oursewor	·k	
3.2	Writing				3.6	E	ssay		
3.3	Oral				3.7	Р	roject		
3.4	OSPE / OSC	CE or P	ractical Skills	Acceptance	3.8	0	ther (spe	cify)	
4.	Discipline o	bjectiv	ves						
	The purpose	of the	discipline. Fo	rmation of stud	ents ' cor	npetenc	e systems	s in the us	se of information
and c	ommunication	techno	ologies in prac	ctical and scient	ific activ	ities			
5.	Learning	outcom	nes (Course le	earning outcon	nes)				
CLO	1 Demonstra	tes kno	wledge and	understanding of	of terms	related	to inform	nation and	l communication
	technologie	es							
CLO	2 Selects and	l classif	fies the main a	and additional c	omputer	devices	selects so	oftware	
CLO	3 Applies me	ethods a	and knowledg	e in the field of	informat	ion and	commun	ication te	chnologies in
	medical pra	actice,	uses Internet 1	esources, cloud	l and mol	oile serv	rices for t	he search	, storage,
	processing.	, protec	tion and disse	emination of inf	ormation				
CLO	4 Uses vario	us type	s of informati	on and commu	nication to	echnolo	gies in pe	ersonal ac	tivities:
	communica	ation sk	tills, the abilit	y to communic	ate inform	nation, p	problems	and their	solution, special
<b>7</b> 1	software fo	r proce	essing medica	I data	<b>FD</b> 1'	1	1 4 1 4 4	1 1 '	
5.1	Course lean	rning	The learning (	outcomes of the	EP, whi	ch are re	elated to t	ne learnir	ig outcomes of
	Outcomes		cl O O Deserve		•	- 4 1-1	11 - 1 4	1 141.	
			CLO 9 Posses	ses effective co	ommunica	ation ski	ills betwe	en health	care stakeholders,
6		LO4	mouvation 10	r continuous pro	oressiona	i develo	pment, a	na cultura	li tolerance.
<b>0.</b>	Details of all		hymkont Al	Earch: 1 ag S	VMA m	in huild	ling 5th	floor Cla	arooma No
0.1	500-511. P	hone: 3	39-57-57 (106	3). Email addr	ess: fiz n	nat ict@	mail.ru	11001, Cla	SSIOOIIIS INO.
6.2	Number	L	ecture	Prac. lessons	Lab.le	essons	S	IW	SIWT
	of hours		10	40		-	,	70	30
7.	Informatio	on abo	ut teachers						
	F 11		Degrees and	Email	Scier	tific int	erests,		1.:
JN⊇	Full nam	e	title	address		etc.	<i>,</i>	Ac	enievements

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1	Ivanova Marina	PhD		marina-	Theory of dif	ferential	A	uthor of	over 50
	Borisovna Profes		sor	iv@mail.ru	equations. Me	edical	sc	cientific pu	blications.
			~		data processi	ng with	0	ne monog	raph. 6
					STATISTICA	SPSS	te	aching ai	ids an
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2.	Berdiyeva	PhD		meruert_ber	Innovative tea	aching	A	uthor of	over 30
	Meruyert			dieva	methods		sc	cientific and r	nethodical
	Aimambetovna			<u>@mail.ru</u>			aı	ticles, 1 l	book, 11
							m	ethodical ins	tructions.
3	Abdrimova	Maste	r'sdeg	zakira75@	Using	statistica		uthor of the t	extbook
	Zakhira Maratovna	ree Se	nior	<u>mail.ru</u>	analysis	software	e   "O	Collection of	reports
		teache	r		STATISTICS	for for	fr fr	om biostatisti	ics" in the
					medical	data	ι K	azakh langua	ge. "ICT".
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							SC	cientific articl	es.
5	Maulenova	Master	r'sdeg	maral_taske	Innovative	teaching	g A	uthor of over	20
	Akmaral	ree Se	nıor	n@mail.ru	methods		sc	cientific and r	nethodical
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<b>8</b> .	Thematic plan		G			a	<b>N</b> T	<b>D</b> (	<b>D</b> (
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	the implementation of an individual task 1 SIW.Development of flowcharts of operation of devices of the computer. Stage 1.	operating system. File directories and folders in operating system.	CLO4	5	task 1	flowchar ts
2	LECTURE. Software. Operating systems. Human-computer interaction.	Software. Types of the software, purpose and characteristic. Basic concepts of OS. Evolution of operating systems. Classification of operating systems, including for mobile devices. Classification of desktop applications. User interface as means of human- computer interaction.	CLO1	1	Lecture informatio n	Feedbac k (quick survey)
	PRACTICAL LESSON. Determination of properties of an operating system. Operation with files and directories.	Multifunctional and single tasking operating system. File directories and folders in operating system.	CLO1 CLO2 CLO3	3	practicum individual task	oral survey practical work
	SIWT Consultation on the implementation of an individual task 2 SIW.Development of flowcharts of operation of devices of the computer. Stage 2.	Graphical method of describing the algorithm for solving the problem	CLO3 CLO4	2/5	individual task 2	compilin g the glossary
3	PRACTICALLESSON.Determinationofrequirementstodevelopment"convenientinapplication"thewebsite.website.	Working with programmer Mobirise.	CLO2 CLO3	2	computer based teaching	individu al task, oral survey
	SIWT Consultation on the implementation of an individual task 3 SIW. Collecting, the analysis and structurization of data in the professional environment (development of the database in the MS Access). Stage 1.	Creation of databases in MS Access for application in professional sphere	CLO3 CLO4	2/4	individual task 3	creating database
4	LECTURE. Database systems	Bases of database systems: concept, characteristic, architecture. Data models. Normalization. Integrity constraint on data. Query tuning	CLO1	1	Lecture- informatio n	Feedbac k (quick survey)

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	PRACTICAL LESSON. Development of database structure, creation of tables and requests. Working with a MySQL relational database. MySQL database administration using php	and their processing. Fundamentals of SQL. Parallel processing of data and their restoration. Design and development of databases. Technology of programming of ORM. The distributed, parallel and heterogeneous databases. The database management system: definitions and functions, basic architectural solutions. The date model of DB. Creating medical database: tables, queries. Working with Forms and Reports.	CLO2	3	computer based teaching	oral survey creation of tables and requests.
	My Admin. Working with a single-table database. SIWT Consultation on the implementation of an individual task 4 SIW. Collecting, the analysis and structurization of data in the professional environment (development of the database in the MS Access). Stage 2.	Creation of databases in MS Access for application in professional sphere	CLO4 CLO3	2/4	individual task 4	for preparati on crosswor d
5	LECTURE. Data analysis. Data management	Data analysis bases. Methods of collection, classification and prediction. Decision trees. Processing of large volumes of data. Methods and stages of Data mining. Tasks Data mining. Visualization of data.	CLO1	1	Lecture informatio n	Feedbac k (quick survey)
	PRACTICAL LESSON. Processing of numerical information, editing formulas and creation of charts in spreadsheet editors.	The database management system: definitions and functions, basic architectural solutions. The date model of DB. Creating medical database: tables, queries. Working with Forms and Reports.	CLO2	3	computer based teaching	individu al task spreadsh eets, oral survey
	SIWT Consultation on the implementation of an individual task 5 SIW. Description of network topology of the office building. Stage 1.	Software, hardware of networks using in the office building	CLO3 CLO4	2/4	individual task 5	creating presentat ion

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6	PRACTICAL LESSON. Design and creation of the presentations of lecture material, scientific reports, etc.	Creating of presentations, entering text on a slide. Adding of pictures and clip art. MS PowerPoint: adding of hyperlinks, animations and sound effects	CLO2 CLO3	2	computer based teaching	individu al task, oral survey
	SIWT Consultation on the implementation of an individual task 6 SIW. Description of network topology of the office building. Stage 2.	Software, hardware of networks using in the office building	CLO4	4	individual task 6	of MCQs
7	LECTURE. Networks and telecommunications	End devices, data transfer devices, transmission medium. Types of networks. Stack protocols: TCP/IP, OSI. IP addressing. Local and wide area networks. Wire and wireless network technologies. DHCP protocol. Technologies of connection to the Internet. Telecommunication technologies.	CLO1	1	Lecture informatio n	Feedbac k (quick survey)
	PRACTICAL LESSON. Creation of a simple network configuration. IP addressing. Monitoring of a network. Analysis of traffic. Use of sniffers for the analysis of network packets.	Networks and telecommunications. Classification of networks. Types of topologies. Types of servers.	CLO2 CLO3	3	Work in pairs, partial search	individu al task, oral survey
	SIW. midterm control 1 accepting SIWT. Preparation for the midterm control1		CLO1	2/ 4	-	Testing MCQ
8	LECTURE. Cybersecurity	Industry of cyber security. Cyber security and control of the Internet. Malicious applications. Standards and specifications in information security field. The acts of the Republic of Kazakhstan governing legal relations in the sphere of information security. Digital signature. Encoding.	CL01	1	Lecture informatio n	Feedbac k (quick survey)
	PRACTICAL LESSON. Use of hardware and software for key generation. Application of the EDS and encoding in case of message exchange	Security risks of information and their classification. Measures and means of information protection. Antivirus software. Archiving utility.	CLO3	3	Work in pairs, computer based teaching	individu al task, oral survey

아파USTIK-QAZAQSTAN 소생하고 SOUTH KAZAKHSTAN	
MEDISINA SKMA	
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	by E-mail. Settings of the Firewall program element of the computer network for network traffic monitoring and filtering. Working with the various antivirus programs. SIWT Consultation on the implementation of an individual task 8 SIW. Comparative analysis of antivirus means of information protection Stage 1.2	Development of presentation and web site with information base about anti-virus programs	CLO4 CLO5	2/ 3	individual task 8	compilin g the glossary for pre- paration crosswor d
9	PRACTICAL LESSON. Data acquisition from the server. Working with WordPress and Joomla web content management systems.	Development a website design using Photoshop multifunctional graphic editor and CSS style sheet language	CLO2 CLO3	2	work in pairs, tasks	individu al task, oral survey
	SIWT Consultation on the implementation of an individual task 9 SIW. Information search in a specialty profile on the Internet, use of cloud services for storage and data processing. Stage 1	Information search in a specialty profile on the Internet, use of cloud services for storage and data processing.	CLO4	2/3	individual task 9	Logical circuits on this topic
10	LECTURE. Internet technology. Cloud and mobile technology	Basic Internet concepts. The Uniform Resource Identifier (URI), its assignment and components. DNS service. Web technologies: HTTP, DHTML, CSS, and JavaScript. E-mail. Message format. SMTP, POP3, IMAP protocols. Data centers. Tendencies of development of the modern infrastructure decisions. Principles of cloud computing. Technologies of virtualization. Web service in the Cloud. Main terms and concepts of mobile technologies. Mobile services. Standards of mobile technologies Introduction to Google Docs and Microsoft Office Web Apps cloud services. Creation accounts to work with cloud services. Study of operation modes	CLO1	1	Lecture informatio n	Feedbac k (quick survey)

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		associated with file storage, sharing and processing. Use of mobile technologies for receiving				
		an information access. GPS navigators GSM a signalling				
	PRACTICAL LESSON. Introduction to Google Docs and Microsoft Office Web Apps cloud services. Creation accounts to work with cloud services. Study of operation modes associated with file storage, sharing and processing. Use of mobile technologies for receiving an information access. GPS navigators. GSM a signaling.	Internet technologies. History of the Internet development. Basic Internet concepts. Cloud technologies. Efficiency of cloud technologies application. Working with mobile applications. Internet technologies. History of the Internet development. Basic Internet concepts. Cloud technologies. Efficiency of cloud technologies application. Working with mobile applications.	CLO3	3	Computer based teaching	individu al task, oral survey
	SIWT Consultation on the implementation of an individual task 10 SIW. Information search in a specialty profile on the Internet, use of cloud services for storage and data processing. Stage 2	Information search in a specialty profile on the Internet, use of cloud services for storage and data processing.	CLO3 CLO4	2/3	individual task 10	compilin g the glossary preparati on crosswor d
11	LECTURE. Multimedia technology. Smart technology	Representation text, audio, video and graphical information in a digital format. Basic technologies for compression of information. 3-D representations of the virtual world and animation. Instruments of development of multimedia applications. Use of multimedia technologies for planning, descriptions of business processes and their visualization.	CLO1	1	Lecture informatio n	Feedbac k (quick survey)
	PRACTICAL LESSON. Creation of video files with use of programs: HyperCam, Adobe Premiere Pro, Windows Movie Maker, etc.	Creating of video files by means of Windows Movie Maker. Use of multimedia technologies for planning, descriptions of business processes and their visualization.	CLO2	3	computer based teaching	creating of video
	SIWT Consultation on the implementation of an individual task 11 SIW. Creation of an emblem, the video and	Creation of an emblem, the video and other materials on a specialty profile means of multimedia technologies.	CLO3 CLO4	2/ 3	individual task 11	creating of video, preparati on crosswor

OŃTÚSTIK-QAZAQSTAN	소설 SOUTH KAZAKHSTAN	
MEDISINA	SKMA -1979- MEDICAL	
АКАДЕМІАЅҮ «Оңтүстік Қазақстан медицина академиясы» АҚ	АСАДЕМУ АО «Южно-Казахстанская медиц	цинская академия»
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	other materials on a specialty profile means of multimedia technologies. Stage 1.					d
1	2 Operation with Smart- applications: Smart TV, Smart Hub, etc.	Creation project skills by working with Google Slides.	CLO2 CLO3	2	computer based teaching	individu al task, creating slides
	SIWT Consultation on the implementation of an individual task 12 SIW. Creation of an emblem, the video and other materials on a specialty profile means of multimedia technologies. Stage 2.	Creation of an emblem, the video and other materials on a specialty profile means of multimedia technologies.	CLO3 CLO4	2/3	individual task 12	creating of an emblem, compilin g the glossary
	3 LECTURE. E-technology. Electronic business. Electronic training. Electronic government	Electronic business: Main models of electronic business. Information infrastructure of electronic business. Legal regulation in electronic business. Electronic training: architecture, structure and platforms. Electronic textbooks. Electronic government: concept, architecture, services. Formats of implementation of the electronic government in developed countries.	CL01	1	Lecture informatio n	Feedbac k (quick survey)
	PRACTICAL LESSON. Operation with services on the website of the electronic government http://egov.kz/cms/ru/gov ernment-service s/for_citizen: registration of requests, obtaining counterparts of documents, etc.	Electronic government: concept, architecture, services. Formats of implementation of the electronic government in developed countries. "Infrastructure of e- government. E-services in the Healthcare."	CLO3	3	computer based teaching	individu al task, oral survey
	SIWT Consultation on the implementation of an individual task 13 SIW. Presentation and protection of the main results of design activity in the specialty. Stage 1,2.	Presentation and protection of the main results of design activity in the specialty.	CLO3 CLO4	2/3	individual task 13	develop ment of graphic objects on medicine
1	4 LECTURE. Information technologies in the	The software for the solution of tasks of the specialized	CLO1	1	Lecture informatio	Feedbac k

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	pro Ind	fessional sphere. ustrial ICT. Prospects	professional sphere. Modern IT trends in the professional sphere:			n	(quick survey)
	of c	levelopment of ICT	medicine, power, etc. Use of				5 an ( • • ) )
			search engines and electronic				
			resources in the professional				
			industrial information and				
			communication technologies.				
			Prospects of development in the				
			sphere of the IT market:				
			development of the free software.				
			entrepreneurship and support				
			small startup of the companies.				
			Programs of acceleration and				
			incubation. Development of				
			electronic payments and logistics.				
			Prospects of development of E-				
			technologies	~~~~	-		
	PR.	ACTICAL LESSON.	Development of structure and the	CLO2	3	computer based	1nd1v1dua
	and	the maintenance of a	environment of remote learning:			teaching	oral
	less	son in the environment	Moodle, eDX, etc.			6	survey
	of r	emote learning:					
	Mo	odle, eDX, etc.		CL O1	2/		Tasting
	acc	enting		CLUI	3		MCO
	SIV	VT. Preparation for the					
	mic	lterm control 2					
15	PR.	ACTICAL LESSON.	Installation and use of application	CLO2	2	computer	individu
	ann	lication and use of	sphere Introduction to	CLO3		based teaching	al task, oral
	the	professional sphere.	STATISTICA 10. Setting			tedening,	survey
	Wo	orking in the Matlab	documents appearance and				5
	env	ironment for scientific	working with charts in				
	and Wo	technical computing.	STATISTICA 10.				
	too	boxes for applied					
	pro	blem solving.					
	SI	WT Consultation on	Feedback from students about the	CLO3	2/		creating
	the	implementation of an	results of learning outcomes.	CLO4	3	individual	of MCQ
	SIW. Defense of the					task 15	
	ind	ependent study of					
	stuc	lents.			4 -		
0	Exa	am preparation and condu	Icting		15		
9.1	1	lectures	Lecture information (feedback quic	k survev)	)		
			······································				

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9.2	Practical lessons	Practical work, oral survey, solve problems						
9.3	SIW / SIWT	individual task logical flowchart screen recording video, project,						
		presentation						
9.4	Mid-term examination	1 Testing (MCQ)						
10.	Evaluation criteria							
10.1.	Criteria for evaluating t	he learning outcome	es of a subject					
№ LO	Name of learning outcomes	Dissatisfying	Satisfying	Good	Excellent			
LO 1	Demonstrates knowledge and perception terms related to information and communication technologies, communication skills, suitable for an effective data exchange.	<ol> <li>Partly acquired basic terms of ICT;</li> <li>Partly knows the role of ICT in key aspects of developed society;</li> <li>Does not define the characteristics of modern personal computer;</li> <li>Does not orient in information recycle, important in solving tasks (massive informa- tion tools, databa- ses, information and communication systems, Internet dictionaries, glossa-ries encyclopedia and etc.);</li> <li>Does not know about following safety requirements and hygiene during the work with computers.</li> </ol>	<ol> <li>Acquired basic terms of ICT;</li> <li>Partly knows the role of ICT in key aspects of developed society;</li> <li>Partly defines the characteristics of modern personal computer;</li> <li>Partly orients in information recycle, important in solving tasks (massive informa- tion tools, databa- ses, information and communication systems, Internet dictionaries, glossa-ries encyclopedia and etc.);</li> <li>Partly knows about following safety requirements and hygiene during the work with computers.</li> </ol>	<ol> <li>Acquired basic terms of ICT;</li> <li>Partly knows the principles and the role of ICT in the key aspects of developed society;</li> <li>Defines the characteristics of modern personal computer;</li> <li>Orients in information recycle, important in solving tasks (massive informa- tion tools, databa- ses, information and communication systems, Internet dictionaries, glossa-ries encyclopedia and etc.);</li> <li>Partly knows about following safety requirements and hygiene during the work with computers.</li> </ol>	<ol> <li>Acquired basic and extended terms of ICT;</li> <li>Knows the main principles and the role of ICT in the key aspects of developed society;</li> <li>Defines the characteristics of modern personal computer;</li> <li>Orients in information recycle, important in solving tasks (massive informa-tion tools, databa- ses, information and communication systems, Internet dictionaries, glossa-ries encyclopedia and etc.);</li> <li>Knows about following safety requirements and hygiene during the work with computer</li> </ol>			
LO 2	Selects and classifies basic extra additional devices and software	<ol> <li>Poorly         classifies the         functional circuits         of the computer         and their devices;         2) Finds difficult     </li> </ol>	<ol> <li>Partly classifies the functional circuits of the computer and their devices;</li> <li>Partly</li> </ol>	<ol> <li>Can classify the functional circuits of the computer and their devices;</li> <li>Can compare</li> </ol>	<ol> <li>classifies the functional circuits of the computer and their devices;</li> <li>Can compare</li> </ol>			



		to compare the	compares the	the sizes of files	the sizes of
		sizes of files of	sizes of files of	of different	files of
		different formats	different formats	formats that store	different
		that store the	that store the	the same	formats that
		some information	some information	information	stora the same
		3) Poorly	3) Poorly	3) Evolutor	information
		3) FOOLLY	3) FOOLLY	5) Evaluates	2) Evolutor
		evaluates	evaluates	information,	5) Evaluates
		information,	information,	information	information,
		including	including	information	including
		information	information	received from the	information
		received from the	received from the	media; does not	received from
		media; does not	media; does not	know how to	the media; does
		know how to	know how to	distinguish	not know how
		distinguish	distinguish correct	correct	to distinguish
		correct	argumentation	argumentation	correct
		argumentation	from incorrect;	from incorrect;	argumentation
		from incorrect;	4) classifies	4) classifies	from incorrect;
		4) classifies	computer	computer	4) classifies
		computer	networks and	networks and	computer
		networks and	explains the	explains the	networks and
		explains the	advantages of	advantages of	explains the
		advantages of	wireless	wireless	advantages of
		wireless	communication	communication	wireless
		communication	5) selects various	5) selects various	communication
		5) selects various	data formats for	data formats for	5) selects
		data formats for	solving problems	solving problems	various data
		solving problems	in spreadsheets	in spreadsheets	formats for
		in spreadsheet	~ <b>r</b>		solving
		in spreudsneet			problems in
					spreadsheets
103	Applies methods and	1) Partially uses	1) Uses Internet	1) Uses Internet	1) Uses Internet
205	information and	Internet resources	resources cloud	resources cloud	resources cloud
	communication	cloud and mobile	and mobile	and mobile	and mobile
	technology awareness	services for the	services for the	services for the	services for the
	on medical practice	search storage	search storage	search storage	search storage
	on medical practice	processing	processing	processing	processing
		processing,	processing,	processing,	processing,
		discomination of	discomination of	discomination of	discomination
		information	information	information	of information
		$\frac{1}{2}$	10000000000000000000000000000000000000	2 $1$ $1$ $1$ $1$ $1$ $1$ $1$ $1$ $1$ $1$	of information $2$ ) Uses the
		2) cannot use the	2) Partially uses	2) Uses the	2) Uses the
		database in	ine database in	uatabase in	uatabase in
		practice;	practice;	practice;	practice;
		3)Cannot test the	3) Cannot test the	3) Can test the	3) Can test the
		used hardware	used hardware	used hardware	used hardware
		and software;	and software;	and software;	and software;
		4) Finds difficult	4) Finds difficult	4) Uses text	4) Uses text
		to use text editors	to use text editors	editors to create	editors to create
		to create and	to create and	and design text	and design text
		design text	design text	documents	documents
		documents	documents	(formatting,	(formatting,
		(formatting,	(formatting,	saving, copying	saving, copying
		saving, copying	saving, copying	fragments, etc.);	fragments, etc.);
		fragments, etc.);	fragments, etc.);	5) Partially	5) Applies the
		5) does not know	5) hesitantly	applies the	acquired skills:

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		how to apply the	applies the	acquired skills: to	to plot the
		acquired skills: to	acquired skills: to	plot the functions	functions
		plot the functions	plot the functions	specified in the	specified in the
		specified in the	specified in the	table and create	table and create
		table and create	table and create	diagrams in the	diagrams in the
		diagrams in the	diagrams in the	spreadsheet:	spreadsheet:
		spreadsheet.	spreadsheet:	T	· · · · · · · · · · · · · · · · · · ·
LO 4	Uses varieties of	1) does not use	1) Partly uses	1) Uses modern	1) Uses modern
	information and	modern software,	modern software,	software, does not	software, does
	communication	does not analyze	does not analyze	analyze medical	not analyze
	technology in personal	medical data	medical data	data using various	medical data
	performance: internet	using various	using various	special software	using various
	sources, cloud and	special software	special software	and does not	special software
	mobile services of	and does not	and does not	interpret the	and does not
	searching, storing,	interpret the	interpret the	results;	interpret the
	recycling, protecting	results;	results;	2) Uses the	results;
	and sharing information.	2) does not use	2) Partly uses the	information	2) Uses the
		the information	information	resources of the	information
		resources of the	resources of the	society and	resources of the
		society and	society and	electronic	society and
		electronic	electronic	means of	electronic
		means of	means of	communication in	means of
		communication in	communication in	educational and	communication
		educational and	educational and	practical	in educational
		practical	practical	activities;	and practical
		activities;	activities;	3) uses	activities;
		3) does not use	3) Partly uses	presentation	3) uses
		presentation	presentation	graphics tools	presentation
		graphics tools	graphics tools	when preparing	graphics tools
		when preparing	when preparing	and conducting	when preparing
		and conducting	and conducting	oral materials	and conducting
		oral materials	oral materials	4) creates cloud	oral materials
		4) does not create	4) hardly creates	data stores	4) creates cloud
		cloud data stores	cloud data stores	5) Partly uses	data stores
		5) does not know	5) does not know	software tools	5) Uses
		how to use	how to use	designed to work	software tools
		software tools	software tools	with this type of	designed to
		designed to work	designed to work	information and is	work with this
		with this type of	with this type of	guided by their	type of
		information and is	information and is	compliance with	information and
		guided by their	guided by their	the task	is guided by
		compliance with	compliance with		their
		the task	the task		compliance
					with the task

10.2. Criteria for assessing of teching methods and technologies							
Checklist f	Checklist for assessing of practical lessons						
Control form	Assessment	Criterion for assessment of students' knowledge					
Oral response	Exellent A (95-100%) A- (90-94%)	<ul> <li>does not allow any errors, inaccuracies;</li> <li>demonstrates knowledge of theoretical material on the topic under consideration;</li> <li>orientates itself in concepts and directions in the field of ICT and gives them a critical assessment;</li> <li>determines the relationship of the topic under consideration with the future profession,</li> </ul>					

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	-	
		gives specific practical examples;
		- refers to additional literary sources when answering, has an additional summary.
	Good	
	B+(85-89%)	- does not allow any errors, inaccuracies;
	B (80-84%)	- demonstrates knowledge of theoretical material on the topic under consideration,
	B- (75-79%)	- the answer was infinited to the use of educational interature specified by the teacher,
	C+(70-74%)	- orientates risen in the main concepts and directions in the field of IC1.
		- makes inaccuracies and non-fundamental errors;
	Satisfactory	- demonstrates partial knowledge of theoretical material on the topic under
	C (65-69%)	consideration;
	C = (60-64%)	- the answer was limited to the use of educational literature specified by the teacher;
	D+(30-34%)	- experienced difficulties in systematizing educational material.
	Unsatisfactory	- makes fundamental errors;
	FX (25-49%)	- does not know the theoretical material on the topic under consideration;
	F (0-24%)	- did not systematize the educational material on the topic under consideration.
		- complies with safety rules when working with equipment;
		- demonstrates extensive knowledge when working with standard Windows OS
		programs and MS Office applications;
	Excellent	- knows the purpose of the main and perefiry devices of the PC;
	$\Delta (95-100\%)$	- complies with the principles of information protection;
	A- (90-94%)	- demonstrates the norms of information ethics;
	() () () ()	- knows how to create, edit, design, store, transfer information objects of various types
		and difficulties using modern software tools and online services;
		- leverages local and wide area network capabilities to collaborate on information;
		- searches for information of various nature on the Internet;
		- installs software on PCs and mobile applications on a smartphone
		- complies with safety rules when working with equipment;
		- demonstrates basic knowledge when working with standard Windows OS programs
	Cool	and MS Office applications;
er.	$D_{\pm}$ (85 80%)	- knows the purpose of the main and perently devices of the PC;
uto	$\mathbf{D}$ + (83-89%) <b>D</b> (80.84%)	- complex with some principles of information protection,
du	B(30-34%) B(75,70%)	- demonstrates the norms of miorination ethics
[0]	$D^{-}(73-79\%)$ C+(70-74%)	using modern software tools and online services:
n a	$C + (70^{-7} + 70)$	- leverages local and wide area network canabilities to collaborate on information:
<b>IO</b> X		- searches for information of various nature on the Internet:
ork		- has difficulty installing software on PCs and mobile applications on a smartphone
Â		- knows the safety rules when working with equipment.
		- demonstrates selective knowledge when working with standard Windows OS
		programs and MS Office applications;
		- knows the purpose of the main and partially peripheral devices of the PC;
	Satisfactory	- does not know how to protect information;
	C (65-69%)	- does not comply with the norms of information ethics;
	C-(60-64%)	- knows how to create, edit, design, store, transfer simple information objects using
	D+(50-54%)	some software tools;
		- does not use the capabilities of the local and wide area networks to collaborate on
		information;
		- searches for selective information on the Internet;
		- has difficulty installing software on PCs and mobile applications on a smartphone.
	Unsatisfactory	- knows the safety rules when working with equipment;
	FX (25-49%)	- it is difficult when working with standard Windows OS programs and MS Office
	F(0-24%)	application programs;
	1 (0 2 1/0)	- knows the purpose of the main and partially peripheral devices of the PC;

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<ul> <li>- does not know how to protect information;</li> <li>- does not know the norms of information ethics</li> <li>- it is difficult to create, edit, design, store, transfer information objects using modern software tools and online services;</li> <li>- does not use the capabilities of the local and wide area networks to collaborate on information;</li> <li>- searches for selective information on the Internet;</li> <li>- has difficulty installing software on PCs and mobile applications on a smartphone</li> </ul>				on
	Task 1. Creating a flowchart	Max 30	Min 15	5
1.	<ul> <li>the flowchart, the algorithm are logically correct;</li> <li>correctly designed input and output data;</li> <li>there are no errors in the use of structural elements of the scheme and algorithm;</li> <li>the student reads the flowchart and algorithm without errors.</li> </ul>	20-30	Exeller	ıt
2.	- the flowchart and algorithm are logically correct, but 1-2 errors or 2-3 shortcomings may be made;	10-20	Good	T
3.	<ul> <li>mistakes were made in the algorithm, structural elements of the flowchart are incorrectly used;</li> <li>when explaining the algorithm, the flowchart, the student experienced difficulties, which were corrected with the help of the teacher;</li> </ul>	0-10	Satisfact y	or
	Task 2. Creating databases	Max 50	Min 25	5
1.	<ul> <li>DB corresponds to a certain subject area;</li> <li>The database contains several interrelated tables;</li> <li>DB tables consist of fields containing different types of data, including graphic ones;</li> <li>DB tables consist of at least 10 lines;</li> <li>when filling tables, various MS Access tools ("Input Mask," "Substitution Wizard," etc.) were used, data was imported from MS Excel;</li> <li>DB contains forms;</li> <li>DB contains simple and cross queries;</li> <li>The database contains reports.</li> </ul>	40-50	Exellent	
2.	<ul> <li>DB corresponds to a certain subject area;</li> <li>The database contains several interrelated tables;</li> <li>DB tables consist of fields containing different types of data, including graphic ones;</li> <li>DB tables consist of at least 10 lines;</li> <li>DB contains forms;</li> <li>The database contains simple queries;</li> <li>The database contains reports.</li> </ul>	30-40	Good	
3.	<ul> <li>DB corresponds to a certain subject area;</li> <li>The database contains several tables;</li> <li>DB tables consist of fields containing different types of data;</li> <li>DB tables consist of less than 10 rows.</li> </ul>	10-30	Satisfact y	or
4.	<ul> <li>DB does not correspond to a certain subject area;</li> <li>The database contains only one table;</li> <li>table fields contain different types of data;</li> <li>The table contains less than 10 rows.</li> </ul>	0-10	Unsatisfa ory	act
	Task 3. Crosswords	Max 10	Min 5	
1.	<ul> <li>Crosswords is based on a given topic;</li> <li>the terms used are significant and reveal the topic;</li> <li>Crosswords does not contain grammatical and punctuation errors;</li> <li>Crosswords contains at least 20 questions;</li> </ul>	5-10	Exeller	ıt

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	- there is a sheet with advice for verification;		
	- the work is originally designed.		
2.	<ul> <li>Crosswords is based on a given topic;</li> <li>Crosswords contains grammatical and punctional errors;</li> <li>Crosswords contains less than 20 questions;</li> <li>there is a sheet with tips for verification.</li> </ul>	0-5	Good
	Task 4. Glossary	Max 10	Min 5
	- Glossary is composed on a given topic;		
1	<ul> <li>Glossary contains at least 20 terms and definitions;</li> <li>definitions are exact, concise, do not contain syntactic errors;</li> <li>the work is originally designed.</li> </ul>	5-10	Exellent
2	<ul> <li>Glossary is composed on a given topic;</li> <li>Glossary contains less than 20 terms and definitions;</li> <li>the definitions contain inaccuracies, errors, are raw material;</li> <li>the work is casually executed.</li> </ul>	0-5	Good
SIW	2		
	Task 1. Creating a Presentation	Max 50	Min 25
1.	<ul> <li>presentation corresponds to the topic;</li> <li>a single design style is observed, the style does not distract from the content of the presentation;</li> <li>different types of slides are used;</li> <li>slides are not loaded with information, easy to read, do not contain syntactic and punctuation errors;</li> <li>graphic and animation elements are used;</li> <li>design principles are observed (laconicity, structure - presentation of the material in a clear, easily memorable form, unification - design in a single graphic and color solution within the entire presentation).</li> </ul>	40-50	Exellent
2.	<ul> <li>presentation corresponds to the topic;</li> <li>a single design style is observed, the style does not distract from the content of the presentation;</li> <li>the same type of slides are used;</li> <li>slides are loaded with information, difficult to read, do not contain syntactic and punctuation errors;</li> <li>graphic and animation elements are used;</li> <li>design principles are partially observed.</li> </ul>	30-40	Good
3.	<ul> <li>presentation corresponds to the topic;</li> <li>the uniform design style is not observed, the style distracts from the content of the presentation;</li> <li>the same type of slides are used;</li> <li>slides are loaded with information, difficult to read, contain syntactic and punctuation errors;</li> <li>graphic and animation elements are used;</li> <li>design principles are not observed.</li> </ul>	10-30	Satisfactor y
4.	<ul> <li>presentation does not correspond to the topic;</li> <li>the uniform design style is not observed, the style distracts from the content of the presentation;</li> <li>the same type of slides are used;</li> <li>slides are loaded with information, difficult to read, contain syntactic and punctuation errors;</li> <li>graphic and animation elements are not used;</li> <li>design principles are not observed.</li> </ul>	0-10 Max 30	Unsatisfact ory Min 15
	Tash 2. Drawing up test questions	mun 30	1111 1 <i>J</i>

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1.	<ul> <li>test tasks correspond to the topic;</li> <li>contain at least 20 questions;</li> <li>the questions are formulated clearly, correctly, specifically;</li> <li>responses are of the same type and adequate;</li> <li>the correct answers are presented separately.</li> <li>test tasks correspond to the topic;</li> <li>contain 15-20 questions;</li> <li>the questions are formulated clearly, correctly, specifically;</li> <li>responses are not of the same type and adequate;</li> <li>there are correct answers.</li> </ul>	20-30	Exellent
2.	<ul> <li>test tasks correspond to the topic;</li> <li>contain 10-15 questions;</li> <li>questions are formulated vaguely, incorrectly, not specifically;</li> <li>responses are not of the same type and adequate;</li> <li>there are correct answers.</li> </ul>	10-20	Good
3.	<ul> <li>test tasks do not correspond to the topic;</li> <li>contain less than 10 questions;</li> <li>questions are formulated vaguely, incorrectly, not specifically;</li> <li>responses are not of the same type and adequate;</li> <li>correct answers are not specified.</li> </ul>	0-10	Satisfactor y
	Task 3. Word-cloud	Max 10	Min 5
1	<ul> <li>word cloud is composed according to the specified topic;</li> <li>more than 50 terms are used;</li> <li>terms do not contain grammatical errors;</li> <li>the work is originally designed.</li> </ul>	5-10	Exellent
2	<ul> <li>word cloud is composed according to the specified topic;</li> <li>less than 50 terms are used;</li> <li>terms contain grammatical errors;</li> <li>the work is originally designed.</li> </ul>	0-5	Good
	Task 4. Glossary	Max 10	Min 5
1	<ul> <li>Glossary is composed on a given topic;</li> <li>Glossary contains at least 20 terms and definitions;</li> <li>definitions are exact, concise, do not contain syntactic errors;</li> <li>the work is originally designed.</li> </ul>	5-10	Exellent
2	<ul> <li>Glossary is composed on a given topic;</li> <li>Glossary contains less than 20 terms and definitions;</li> <li>the definitions contain inaccuracies, errors, are raw material;</li> <li>the work is casually executed.</li> </ul>	0-5	Good
SIW	3		
	Task 1. Knowledge Base Logic scheme	Max 30	Min 15
1.	<ul> <li>the scheme is simple and concise, placed on one page;</li> <li>basic and sufficient concepts on the topic are highlighted as elements of the scheme;</li> <li>circuit elements are arranged so that their hierarchy is clear (for example, general and specific - in the center, on the periphery - auxiliary);</li> <li>logical connections are established between the circuit elements (inside the circuit and external, i.e., relationship with adjacent circuits);</li> <li>visual diagram (convenient for perception): symbols, graphic material, color shades, tables, illustrated material are used.</li> </ul>	20-30	Exellent
2.	<ul> <li>the diagram is placed on one page;</li> <li>basic and sufficient concepts on the topic are highlighted as elements of the scheme;</li> <li>hierarchy of circuit elements is not traced, material is presented chaotically;</li> </ul>	10-20	Good

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	<ul> <li>logical connections are established between the circuit elements (inside the circuit and external, i.e., relationship with adjacent circuits);</li> <li>the diagram is not visual.</li> </ul>			
3.	<ul> <li>the diagram is placed on more than one page;</li> <li>elements of the scheme are not basic and sufficient concepts on the topic;</li> <li>hierarchy of circuit elements is not traced, material is presented chaotically;</li> <li>no logical connections are established between the circuit elements;</li> <li>the diagram is not visual.</li> </ul>	0-10	Satisfactor y	
	Task 2. Creating website	Max 50	Min 25	
1.	<ul> <li>the website corresponds to the selected topic, the main ideas of the project are revealed and substantiated;</li> <li>the organizational structure is clear;</li> <li>the site has its own style - typography (artistic design of text using fonts, symbols and signs) and the general design of Good are combined;</li> <li>the color palette is correctly used;</li> <li>different types of blocks (tabs, shapes,contacts, card, counters,etc. are used at least 3</li> <li>included are hyperlinks to other sources of information on subjects not less than 5;</li> <li>the site contains several pages (2 or more);</li> <li>there are no grammatical and syntactic errors in the content;</li> <li>graphic objects are included.</li> </ul>	40-50	Exellent	
2.	<ul> <li>the website corresponds to the selected topic, the main ideas of the project are not fully disclosed;</li> <li>the organizational structure is clear;</li> <li>typography and general design are combined;</li> <li>background and color correspond to each other;</li> <li>different types of blocks (tabs,shapes,contacts,card,counters, etc.) are used at least 2;</li> <li>hyperlinks to other sources of information on subjects not less than 3 are included;</li> <li>the site consists of 1 page;</li> <li>there are grammatical and syntactic errors in the content.</li> </ul>	30-40	Good	
3.	<ul> <li>the website corresponds to the selected topic;</li> <li>navigation elements are illogical;</li> <li>typography and general design are not combined;</li> <li>background and color do not correspond to each other;</li> <li>blocks of different types (tabs, shapes, contacts, card, counters, etc.) less than 2 are used;</li> <li>hyperlinks to other sources of information on topics less than 3 are included;</li> <li>the site consists of 1 page;</li> <li>content is difficult to perceive;</li> <li>there are grammatical and syntactic errors in the content.</li> </ul>	10-30	Удов-но	
4.	<ul> <li>the website does not match the selected topic;</li> <li>navigation elements are illogical;</li> <li>typography and general design are not combined;</li> <li>background and color do not correspond to each other;</li> <li>blocks of different types (tabs, shapes, contacts, card, counters, etc.) less than 2 are used;</li> <li>there are no hyperlinks to other sources of information on the topic;</li> <li>the site consists of 1 page;</li> <li>content is difficult to perceive;</li> <li>there are grammatical and syntactic errors in the content.</li> </ul>	0-10	Unsatisfact ory	

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	Task 3. Word cloud	Max 10	Min 5	
1	- word cloud is composed according to the specified topic;			
	- more than 50 terms are used;	5 10	<b>F</b> == 11 = 11 f	
	- terms do not contain grammatical errors;	5-10	Exellent	
	- the work is originally designed.			
2	- word cloud is composed according to the specified topic:			
	- less than 50 terms are used:		~ .	
	- terms contain grammatical errors:	0-5	Good	
	- the work is originally designed.			
	Task 4. Glossary	Max 10	Min 5	
	- Glossary is composed on a given topic:			
	- Glossary contains at least 20 terms and definitions:			
1	- definitions are exact, concise, do not contain syntactic errors:	5-10	Exellent	
	- the work is originally designed			
	- Glossary is composed on a given tonic:			
	- Glossary contains less than 20 terms and definitions:			
2	- the definitions contain inaccuracies errors are raw material:	0-5	Good	
	- the work is casually executed			
SI	- the work is casually executed.			
	Task 1. Creating Videos	Max 30	Min 15	
	the video is informative informative, the topic is disclosed:	Max 30	IVIIII 13	
	- the video is informative, informative, the topic is disclosed,			
	- the director's decision is original;			
	- there are visual effects of the video sequence: credits, text screensavers, graphic			
	screensavers, logo;			
1.	- participation in the author's video;	20-30	Exellent	
	- work with sound: music or readable text corresponds to the content of the video			
	sequence, high-quality sound, volume is adjusted, sound and image are			
	synchronous;			
	- working with image effects: brightness, contactness, cropping;			
	- video duration is not more than 3 minutes.			
	- the video is informative, the topic is disclosed;			
	- there are visual effects of the video sequence: credits, text screensavers, graphic			
	screensavers, logo;			
2.	- work with sound: music or readable text corresponds to the content of the video	10-20	Good	
	sequence, high-quality sound, volume is adjusted, sound and image are			
	synchronous;			
	- working with image effects: brightness, contactness, cropping;			
<u> </u>	- video duration 2-3 minutes.			
	- the video is uninformative, the topic is not disclosed;			
	- visual effects of the video sequence are small or absent;			
3.	- music or readable text does not correspond to the content of the video sequence,	0-10	Satisfactor	
	the sound is poor;	0 10	У	
	- the images are not bright, the contortion is not observed, the images are distorted;			
	- video duration is less than 2 minutes.			
	Task 2. Creating emblems, logos	Max 50	Min 25	
	- the image is unique (original, unique);			
	- the image is associative - each of its elements should be associated with the			
	selected field of activity, any line makes sense;			
1	- the image is concise - the simpler the image, the better perceived it is;	40-50	Fxellent	
1.	- the image is universal - it is possible to place on the site, on clothes, etc.	70-20	LACITCIII	
	- the color palette and fonts are correctly used;			
	- demonstration of the emblem (logo) is accompanied by explanations of the author			
	(the idea is explained, which symbolizes the elements of the emblem)			

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- the image is not associative enough;       30-40       Good         - the image is not associative enough;       30-40       Good         - the color paletic and fonts are correctly used;       - demonstration of the emblem (logo) is accompanied by explanations of the author.       30-40       Good         - the image is not associative enough;       - non-universal image;       10-30       Yace-no         - the image is not associative enough;       - non-universal image;       - non-universal image; <th>-</th> <th></th> <th></th> <th></th> <th></th>	-				
- the image is unique;       - the image is not associative enough;         - color palette is not used correctly;       - color palette is not used correctly;         - emonstration of the emblem (logo) is accompanied by explanations of the author.       0-10       Unsatisfact ory;         - image is non-universal image;       0-10       Unsatisfact ory;         - The color palette is not used correctly.       0-10       Unsatisfact ory;         - more than 50 terms are used;       - start org;       - for ory;         - terms do not contain grammatical errors;       - terms do not contain grammatical errors;       - for ory;         - the work is originally designed.       0-5       Good         2       - word cloud is composed according to the specified topic;       -       -         - terms do not contain grammatical errors;       -the work is originally designed.       0-5       Good         2       - word cloud is composed according to the specified topic;       -	2		<ul> <li>the image is unique (original, unique);</li> <li>the image is not associative enough;</li> <li>the image is overloaded with parts;</li> <li>image is universal;</li> <li>the color palette and fonts are correctly used;</li> <li>demonstration of the emblem (logo) is accompanied by explanations of the author.</li> </ul>	30-40	Good
- image is not unique;       - image is non-associative;       0-10       Unsatisfact ory         - non-universal image;       -The color palette is not used correctly.       Max 10       Min 5         - more than 50 terms are used;       - imore than 50 terms are used;       5-10       Excllent         - the work is originally designed.       0-5       Good         2       - word cloud is composed according to the specified topic;       0-5       Good         - terms do not contain grammatical errors;       0-5       Good       Good         - terms contain grammatical errors;       0-5       Good       Good         - terms contain grammatical errors;       0-5       Good       Good         - terms contain grammatical errors;       0-5       Good       Excllent         - flotistions are exact;       0       0-5       Good         - terms contain grammatical errors;       0       0       0       Max 10       Min 5         - Glossary contains at least 20 terms and definitions;       0       0-5       Good       Good         - eth ework is originally designed.       0-5       Good       Good       Exellent         - definitions are exact; concise, do not contain syntactic errors;       -10       Exellent       6         - the wor	3		<ul> <li>the image is unique;</li> <li>the image is not associative enough;</li> <li>non-universal image;</li> <li>color palette is not used correctly;</li> <li>demonstration of the emblem (logo) is accompanied by explanations of the author.</li> </ul>	10-30	Удов-но
Task 3. Word cloud       Max 10       Min 5         1       - word cloud is composed according to the specified topic; - more than 50 terms are used; - terms do not contain grammatical errors; - the work is originally designed.       5-10       Exellent         2       - word cloud is composed according to the specified topic; - less than 50 terms are used; - terms contain grammatical errors; - the work is originally designed.       0-5       Good         3       - Glossary contains at least 20 terms and definitions; - definitions are exact, concise, do not contain syntactic errors; - the work is originally designed.       Max 10       Min 5         4       - Glossary is composed on a given topic; - Glossary contains less than 20 terms and definitions; - the work is originally designed.       5-10       Exellent         5       - Glossary is composed on a given topic; - Glossary contains less than 20 terms and definitions; - the definitions contain inaccuracies, errors, are raw material; - the work is casually executed.       0-5       Good         SIWS	4	•	<ul> <li>image is not unique;</li> <li>image is non-associative;</li> <li>non-universal image;</li> <li>The color palette is not used correctly.</li> </ul>	0-10	Unsatisfact ory
1       - word cloud is composed according to the specified topic;       5-10       Excellent         - more than 50 terms are used;       5-10       Excellent         - terms do not contain grammatical errors;       0-5       Good         - terms contains are exact; concise, do not contain syntactic errors;       5-10       Exellent         - Glossary is composed on a given topic;       - Glossary is composed on a given topic;       - Glossary is composed on a given topic;       - Gossary is contain inaccuracies, errors, are raw material;      5       Good         - the work is casually executed.       SIW 5      5       Good       Exellent         - the image is associative encoup;       - the image is not associative encoup;       - the image is not associative encoup;         - the image is not associative encoup;       <			Task 3. Word cloud	Max 10	Min 5
2       - word cloud is composed according to the specified topic;       0-5       Good         - less than 50 terms are used;       - terms contain grammatical errors;       0-5       Good         - the work is originally designed.       Max 10       Min 5         - Glossary is composed on a given topic;       - Glossary contains at least 20 terms and definitions;       5-10       Exellent         - Glossary ocntains exext, concise, do not contain syntactic errors;       - 5-10       Exellent         - Glossary is composed on a given topic;       - Glossary ontains less than 20 terms and definitions;       - 6-5       Good         - the work is originally designed.       - 6-5       Good       Good         - the work is casually executed.       - the work is casually executed.       0-5       Good         SIW 5       - the image is associative – each of its elements should be associated with the chosen field of activity, any line makes sense;       - the image is concise – the simpler the image, the better it is perceived;       + the image is ourique (original, unique);       - the image is ouriscate enough;       - the image is ouriscate enough;       - 10-30       Y_dob-50         - the image is not associative enough;       - color palette is not used correctly.       - the image is not associative enough;       - 10-30       Y_dob-100         - the image is not associative enough;       - color palette is not used corre		1	<ul> <li>word cloud is composed according to the specified topic;</li> <li>more than 50 terms are used;</li> <li>terms do not contain grammatical errors;</li> <li>the work is originally designed.</li> </ul>	5-10	Exellent
Task 4. Glossary       Max 10       Min 5         - Glossary is composed on a given topic;       - Glossary contains at least 20 terms and definitions;       5-10       Exellent         - definitions are exact, concise, do not contain syntactic errors;       - flossary contains at least 20 terms and definitions;       5-10       Exellent         - definitions are exact, concise, do not contain syntactic errors;       - flossary contains leas than 20 terms and definitions;       0-5       Good         - the work is originally designed.       - Glossary contains leas than 20 terms and definitions;       0-5       Good         - the definitions contain inaccuracies, errors, are raw material;       - flossary contains leas than 20 terms and definitions;       0-5       Good         - the work is casually executed.       - the work is casually executed.       - flossary       - flossary       Max 70       Min 30         - the image is subjects related to the future profession       - Max 70       Min 30       - the image is associative – each of its elements should be associated with the image is concise – the simpler the image, the better it is perceived;       - the color palette is used correctly.       - the image is unique (original, unique);       - the image is ond associative enough;       - the color palette is correctly used;       - the image is not associative enough;       - the image is not associative enough;       - color palette is not used correctly;       - the image is not associative enough; <td></td> <td>2</td> <td><ul> <li>word cloud is composed according to the specified topic;</li> <li>less than 50 terms are used;</li> <li>terms contain grammatical errors;</li> <li>the work is originally designed.</li> </ul></td> <td>0-5</td> <td>Good</td>		2	<ul> <li>word cloud is composed according to the specified topic;</li> <li>less than 50 terms are used;</li> <li>terms contain grammatical errors;</li> <li>the work is originally designed.</li> </ul>	0-5	Good
- Glossary is composed on a given topic; - Glossary contains at least 20 terms and definitions; - definitions are exact, concise, do not contain syntactic errors; - the work is originally designed.5-10Exellent2- Glossary contains less than 20 terms and definitions; - the definitions contain inaccuracies, errors, are raw material; - the work is casually executed.0-5GoodSIW 5Task 1. Creation of graphic objects related to the future professionMax 70Min 30- the image is unique (original, unique); - the image is sonsciative – each of its elements should be associated with the the color palette is used correctly.40-50Exellent2 the image is unique (original, unique); - the image is not associative enough; - the image is not used correctly.10-30Удов-но- the image is not used correctly10Unsatisfact ory- the image is not unique, it is not self-sufficient; - The color palette is not used correctly.0-10Unsatisfact ory <td></td> <td></td> <td>Task 4. Glossary</td> <td>Max 10</td> <td>Min 5</td>			Task 4. Glossary	Max 10	Min 5
2- Glossary is composed on a given topic; - Glossary contains less than 20 terms and definitions; - the definitions contain inaccuracies, errors, are raw material; - the work is casually executed.0-5GoodSIW 5Task 1. Creation of graphic objects related to the future professionMax 70Min 30I Task 1. Creation of graphic objects related to the future professionMax 70Min 30I Task 1. Creation of graphic objects related to the future professionMax 70Min 30I the image is unique (original, unique); - the image is associative – each of its elements should be associated with the chosen field of activity, any line makes sense; - the color palette is used correctly.40-50Exellent2 the image is concise – the simpler the image, the better it is perceived; - the image is not associative enough; - the image is not associative enough; - the image is overloaded with parts; - the color palette is correctly used; - the image is not associative enough; - the image is not unique, it is not self-sufficient; - the image is not unique, it is not self-sufficient; - the image is not unique, it is not self-sufficient; - The color palette is not used correctly.Unsatisfact ory4 image is not usel correctly.Max 30Min		1	<ul> <li>Glossary is composed on a given topic;</li> <li>Glossary contains at least 20 terms and definitions;</li> <li>definitions are exact, concise, do not contain syntactic errors;</li> <li>the work is originally designed.</li> </ul>	5-10	Exellent
SIW 5Task 1. Creation of graphic objects related to the future professionMax 70Min 30- the image is unique (original, unique); - the image is associative – each of its elements should be associated with the chosen field of activity, any line makes sense; - the image is concise – the simpler the image, the better it is perceived; - the color palette is used correctly.40-50Exellent2 the image is not associative enough; - the image is overloaded with parts; - the color palette is correctly used;30-40Good3 the image is not associative enough; - the color palette is not used correctly;10-30Удов-но3 the image is not associative enough; - the color palette is not used correctly;10-30Удов-но4 the image is not associative; - the color palette is not used correctly.0-10Unsatisfact ory4 the image is not used correctly the image is not used correctly.0-10Unsatisfact ory		2	<ul> <li>Glossary is composed on a given topic;</li> <li>Glossary contains less than 20 terms and definitions;</li> <li>the definitions contain inaccuracies, errors, are raw material;</li> <li>the work is casually executed.</li> </ul>	0-5	Good
Task 1. Creation of graphic objects related to the future professionMax 70Min 30- the image is unique (original, unique); - the image is associative – each of its elements should be associated with the chosen field of activity, any line makes sense; - the image is concise – the simpler the image, the better it is perceived; - the color palette is used correctly.40-50Exellent2 the image is not associative enough; - the color palette is correctly used; - the color palette is correctly used; - the image is not associative enough; - the image is not associative enough; - the color palette is correctly used;30-40Good3 the image is not associative enough; - the image is not associative enough; - the color palette is correctly used;10-30Удов-но4 the image is not unique, it is not self-sufficient; - the color palette is not used correctly.0-10Unsatisfact ory4 Task 2. Drawing up test questionsMax 30Min 15	S	IW	5		
- the image is unique (original, unique); - the image is associative – each of its elements should be associated with the chosen field of activity, any line makes sense; - the image is concise – the simpler the image, the better it is perceived; - the color palette is used correctly.40-50Exellent2 the image is oncise – the simpler the image, the better it is perceived; - the image is not associative enough; - the image is overloaded with parts; - the color palette is correctly used;30-40Good3 the image is not associative enough; - the image is not used correctly.10-30Удов-но4 the image is not unique, it is not self-sufficient; - image is non-associative; - The color palette is not used correctly.0-10Unsatisfact ory4 Task 2. Drawing up test questionsMax 30Min 15			Task 1. Creation of graphic objects related to the future profession	Max 70	Min 30
2 the image is unique (original, unique); - the image is not associative enough; - the image is overloaded with parts; - the color palette is correctly used;30-40Good3 the image is unique; - the image is not associative enough; - the image is not associative enough; - color palette is not used correctly;10-30Удов-но4 the image is not unique, it is not self-sufficient; - the color palette is not used correctly.0-10Unsatisfact ory7.Task 2. Drawing up test questionsMax 30Min 15	1		<ul> <li>the image is unique (original, unique);</li> <li>the image is associative – each of its elements should be associated with the chosen field of activity, any line makes sense;</li> <li>the image is concise – the simpler the image, the better it is perceived;</li> <li>the color palette is used correctly.</li> </ul>	40-50	Exellent
- the image is unique;10-30Удов-но3 the image is not associative enough; - color palette is not used correctly;10-30Удов-но4 the image is not unique, it is not self-sufficient; - image is non-associative; - The color palette is not used correctly.0-10Unsatisfact ory4.Task 2. Drawing up test questionsMax 30Min 15	2	•	<ul> <li>the image is unique (original, unique);</li> <li>the image is not associative enough;</li> <li>the image is overloaded with parts;</li> <li>the color palette is correctly used;</li> </ul>	30-40	Good
4 the image is not unique, it is not self-sufficient; - image is non-associative; - The color palette is not used correctly.0-10Unsatisfact oryTask 2. Drawing up test questionsMax 30Min 15	3	•	<ul> <li>the image is unique;</li> <li>the image is not associative enough;</li> <li>color palette is not used correctly;</li> </ul>	10-30	Удов-но
Task 2. Drawing up test questionsMax 30Min 15	4	•	<ul> <li>the image is not unique, it is not self-sufficient;</li> <li>image is non-associative;</li> <li>The color palette is not used correctly.</li> </ul>	0-10	Unsatisfact ory
			Task 2. Drawing up test questions	Max 30	Min 15

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1.	<ul> <li>test tasks correspondent</li> <li>contain at least 200</li> <li>the questions are interported and the correct answer</li> <li>test tasks correspondent</li> <li>the questions are interported and the questions are interported and the correct and the questions are interported and the correct and</li></ul>	ond to the topic; ) questions; formulated clearly, correctly, sp he same type and adequate; rs are presented separately. ond to the topic; estions; formulated clearly, correctly, sp of the same type and adequate; unswers.	pecifically; pecifically;		20-3	0	Exellent
2.	<ul> <li>test tasks correspondent</li> <li>contain 10-15 que</li> <li>questions are form</li> <li>responses are not</li> <li>there are correct and</li> </ul>	ond to the topic; estions; nulated vaguely, incorrectly, no of the same type and adequate; inswers.	t specifically;		10-2	0	Good
3.	<ul> <li>test tasks do not c</li> <li>contain less than</li> <li>questions are form</li> <li>responses are not</li> <li>correct answers and</li> </ul>	orrespond to the topic; 10 questions; nulated vaguely, incorrectly, no of the same type and adequate; re not specified.	t specifically;		0-10	)	Satisfactor y
Chec	k List for midterm co	ontrol					
Con	nputer testing			Max	100		Min 50
Tes	ting is carried out in	electronic form.		90-1	00		Exellent
The	test contains 25 que	estions.		70-	89	~	Good
AI	00-point scale is use	d for evaluation.	<b>50</b> · · ·	50-	69 10		atisfactory
Tes	t time is determined	by the instructor (not more than	1 50 mm)	<5	0	He	Satisfactory
Final			D (				1. 4 41
Gra	ading by letter	Digital equivalent of	Percentage	Asse	essment	accor	ding to the
Gra	ading by letter system	Digital equivalent of points	Percentage	Asso	essment traditio	accor nal sy	ding to the ystem
Gra	ading by letter system A	Digital equivalent of points 4,0	Percentage 95-100	Asse	essment traditio Ex	accor nal sy ellent	ding to the ystem
Gra	ading by letter system A A -	Digital equivalent of points 4,0 3,67	Percentage 95-100 90-94		essment traditio Ex	accor onal sy ellent	ding to the ystem
Gra	A A A A - B +	Digital equivalent of points 4,0 3,67 3,33	Percentage 95-100 90-94 85-89	Asso 	essment a traditio Ex	accor onal sy ellent	rding to the ystem
Gra	A A A - B + B B	Digital equivalent of points 4,0 3,67 3,33 3,0 2,67	Percentage 95-100 90-94 85-89 80-84 75-70	Asso	essment i traditio Ex G	accor onal sy ellent	ding to the ystem
Gra	A A A A B B B B C+	Digital equivalent of points 4,0 3,67 3,33 3,0 2,67 2,33	Percentage 95-100 90-94 85-89 80-84 75-79 70.74	Asso	essment : traditio Ex G	accor onal sy ellent	ding to the ystem
Gra	A A A A B B B B C C C	Digital equivalent of points 4,0 3,67 3,33 3,0 2,67 2,33 2,0	Percentage 95-100 90-94 85-89 80-84 75-79 70-74 65-69		essment traditio Ex G	accor mal sy ellent dood	rding to the ystem
Gra	A A A A B B B B C C C C C C C	Digital equivalent of points 4,0 3,67 3,33 3,0 2,67 2,33 2,0 1,67	Percentage 95-100 90-94 85-89 80-84 75-79 70-74 65-69 60-64	Asso	essment i traditio Ex G satist	accor nal sy ellent Good factor	rding to the ystem
Gra	A A A A A B B B B C C C C C C D+	Digital equivalent of points 4,0 3,67 3,33 3,0 2,67 2,33 2,0 1,67 1,33	Percentage 95-100 90-94 85-89 80-84 75-79 70-74 65-69 60-64 55-59	Asso	essment a traditio Exa G satist	accor onal sy ellent dood factor	rding to the ystem
Gra	Control       ading by letter       system       A       A -       B +       B       C +       C       C -       D+       D-	Digital equivalent of points 4,0 3,67 3,33 3,0 2,67 2,33 2,0 1,67 1,33 1 0	Percentage 95-100 90-94 85-89 80-84 75-79 70-74 65-69 60-64 55-59 50-54		essment a traditio Exa G satist	accor onal sy ellent Good factor	rding to the ystem
Gra	Control       ading by letter       system       A       A -       B +       B       B -       C +       C       C -       D+       D-       FX	Digital equivalent of points 4,0 3,67 3,33 3,0 2,67 2,33 2,0 1,67 1,33 1,0 0 5	Percentage 95-100 90-94 85-89 80-84 75-79 70-74 65-69 60-64 55-59 50-54 25-49		essment i traditio Ex G satist	accor nal sy ellent Good factor	rding to the ystem
	ading by letter system A A - B + B B - C + C C - C - D+ D- FX Learning recou	Digital equivalent of points 4,0 3,67 3,33 3,0 2,67 2,33 2,0 1,67 1,33 1,0 0,5	Percentage 95-100 90-94 85-89 80-84 75-79 70-74 65-69 60-64 55-59 50-54 25-49		essment a traditio Exa G satist unsat	accor mal sy ellent Good factor	rding to the ystem
	Control       ading by letter       system       A       A -       B +       B       B -       C +       C       C -       D+       D-       FX       Learning resou       databases_anime	Digital equivalent of points           4,0           3,67           3,33           3,0           2,67           2,33           2,0           1,67           1,33           1,0           0,5	Percentage 95-100 90-94 85-89 80-84 75-79 70-74 65-69 60-64 55-59 50-54 25-49 Lblogs websites other		essment a traditio Exa G satist unsat	accor nal sy ellent Good factor	rding to the ystem
Final Gra	A A A B B B C C C C C C C C D H D- FX <b>Learning resou</b> databases, anima (for example: vi	Digital equivalent of points           4,0           3,67           3,33           3,0           2,67           2,33           2,0           1,67           1,33           1,0           0,5           rces           ation simulators, professional           deo_audio_digests)	Percentage 95-100 90-94 85-89 80-84 75-79 70-74 65-69 60-64 55-59 50-54 25-49 Ublogs, websites, other of	Asso	essment a traditio Exa G satist unsat	accor nal sy ellent Good factor isfact	rding to the ystem
	A A A A B B B B C C C C C C C D H D- FX <b>Learning resou</b> databases, anima (for example: vie	Digital equivalent of points           4,0           3,67           3,33           3,0           2,67           2,33           2,0           1,67           1,33           1,0           0,5           rces           ation simulators, professional deo, audio, digests)           em (Medicinew)	Percentage 95-100 90-94 85-89 80-84 75-79 70-74 65-69 60-64 55-59 50-54 25-49 blogs, websites, other of https://		essment a traditio Exa G satist unsat ic referen	accor mal sy ellent Good factor isfact	rding to the ystem
Final Gra	Control       ading by letter       system       A       A -       B +       B       B -       C +       C       C -       D+       D-       FX       Learning resou       databases, anima       (for example: vir       Information syst	Digital equivalent of points           4,0           3,67           3,33           3,0           2,67           2,33           2,0           1,67           1,33           1,0           0,5           rces           ation simulators, professional deo, audio, digests)           rem «Medicine»	Percentage 95-100 90-94 85-89 80-84 75-79 70-74 65-69 60-64 55-59 50-54 25-49 l blogs, websites, other of https://	Asso	essment a traditio Exa G satist unsat ic referen zakon.kz	accor mal sy ellent Good factor isfact nce m	rding to the ystem
Final Gra	ading by letter         system         A         A -         B +         B         C +         C         D+         D-         FX         Learning resou         databases, anima         (for example: vir)         Information syst         tronic textbooks	Digital equivalent of points 4,0 3,67 3,33 3,0 2,67 2,33 2,0 1,67 1,67 1,33 1,0 0,5 <b>rces</b> ation simulators, professional deo, audio, digests) tem «Medicine»	Percentage 95-100 90-94 85-89 80-84 75-79 70-74 65-69 60-64 55-59 50-54 25-49 I blogs, websites, other of https://	Asso	essment a traditio Exa G satist unsat ic referen zakon.kz	accor onal sy ellent Good factor isfact nce m /Med	rding to the ystem
Final           Gra           Interview           Interview           Interview	ading by letter system A A - B + B B - C + C C - D+ D- FX <b>Learning resou</b> databases, anima (for example: via Information syst <b>tronic textbooks</b> Сапрыгина, М. Б. Та	Digital equivalent of points 4,0 3,67 3,33 3,0 2,67 2,33 2,0 1,67 1,33 1,0 0,5 rces ation simulators, professional deo, audio, digests) tem «Medicine»	Percentage           95-100           90-94           85-89           80-84           75-79           70-74           65-69           60-64           55-59           50-54           25-49           I blogs, websites, other           https://	Asso Asso electron /online.z	essment a traditio Exa G satist unsat ic referen zakon.kz pecypc]:	accor onal sy ellent Good factor isfact nce m /Med	rding to the ystem
Final           Gra	ading by letter system A A - B + B B - C + C C - D+ D- FX <b>Learning resou</b> databases, anima (for example: vir Information syst tronic textbooks Сапрыгина, М. Б. Т юсобие / М.Б. Сап	Digital equivalent of points           4,0           3,67           3,33           3,0           2,67           2,33           2,0           1,67           1,33           1,0           0,5           rces           ation simulators, professional deo, audio, digests)           cem «Medicine»           Information and communicat прыгина, К. Кудабаев Эл           Информационное право (о	Percentage           95-100           90-94           85-89           80-84           75-79           70-74           65-69           60-64           55-59           50-54           25-49           I blogs, websites, other of https://           tion technology [Электр текстовые дан. (20.2M бидая часть) [Текст] : х	Asso Asso electron /online.z	essment i traditio Ex G satist unsat unsat ic referen zakon.kz pecypc]:	accor nal sy ellent Good factor isfact nce m /Med : yчe6 s.n.], (a3H)	rding to the ystem

Фараби. - Алматы: Қазақ ун-ті, 2015. - 147c http://elib.kaznu.kz 3. Информатика и информационные технологии в профессиональной деятельности: учебник/ А.А. Бабкин, С.В. Видов, С.А. Грязнов и др.; под ред.: В.П. Корячко, М.И. Купцов; ФСИН, Академия

онтизтик-дагаодтан МЕДІЗІНА АКАДЕМІАЗҮ «Оңтүстік Қазақстан медицина академиясы» АҚ Онтизстан сазахстанская меди	цинская академия»
Department of "Medical Biophysics and Information Technology"	044-35/09 ( )
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права и управления.- Рязань: Академия ФСИН России, 2016.- 354 с. http://elib.kaznu.kz

- 4. Қ.Ж. Құдабаев. «Информатика» Оқу құралы. Алматы, «Эве-ро», 2020ж. 216б.
- https://elib.kz/ru/search/read\_book/328/
- 5. Ricklefs V.P. Basics of Informatics: Educational manual for medical specialties of higher educational.– Almaty: Publishing house «Эверо», 2020.– 242p https://elib.kz/ru/search/read\_book/363/
- 6. К.Ж.Кудабаев, З.С.Халметов, А.А.Мауленова, З.М. Абдримова, А.С.Байдилдаева. Учебнометодическое пособие «Сборник тестовых заданий по информатике». Алматы, «Эверо», 2020г., 150 с. https://elib.kz/ru/search/read\_book/2948/
- Urmashev B.A.Information-communication technology: Textbook/ Ministry of education and science of the Republic of Kazakhstan, Association of higher educational institutions of Kazakhstan. - Almaty: Bookprint, 2016. - 413 p. http://rmebrk.kz/

Laboratory physical resources Computers and other electronical devices

### Special programs

1 MS office (Word. Excel. Access. Power point )

- 2 Adobe Photoshop, Bandicam, Movie maker, video pad etc.
- 3 Moodle, Courser a, STATISTICA

#### Main Literature

- 1. Нурпеисова Т. Б. Информационно-коммуникационные технологии: учеб. пособие.-2017
- 2. Хакимова Т. Практикум по курсу "Основы информатики": уч.пос. Алматы: "NURPRESS".-2013
- 3. Urmashev B.A. Information-communication technology: Textbook /B.A. Urmashev.-Almaty: Association of higher educational instutions of Kazakhstan, 2016
- 4. Koshimbaev Sh.K. Automation of standard technological processes [Text]: textbook / Sh.K.Koshimbaev, B.A. Suleimenov.-Almaty:[s.n.], 2016.- 266p.
- 5. Methods of teaching computer science [Текст]: Textbook / E. Bidaibekov [and etc.].- Almaty:[s.n.], 2016.- 359р
- 6. Nurpeisova T.B. Information andCommunication Technologies: Text-book / T.B. Nurpeisova, I.N. Kaidash.- Almaty: Bastau, 2017.- 480 p.
- 7. Manapov N.T. Computer chemistry [Tekct] : textbook/ N.T. Manapov.- Almaty: Association of higher educational institutions of Kazakhstan, 2016. 312 p 8.

#### Additional Literature

8. Қойбағарова Т.Қ. Информатика: оқу-әдістемелік құралы - Түзет. толықт. 2-бас. - Алматы: Эверо.-2014, 324 бет

9. Информатикадан тест тапсырмаларының жинағы: оқу-әдістемелік құрал / Қ. Ж. Құдабаев [т.б.]. - Алматы: Эверо.-2014

Electi	Electronic database				
N⁰	Title	Link			
1	SKMA Repository	http://lib.ukma.kz/repository/			
2	Republican Interuniversity Electronic Library	http://rmebrk.kz/			
3	Student Advisor	http://www.studmedlib.ru/			
4	Open University of Kazakhstan	https://openu.kz/kz			
5	Law (access in the reference and information sector)	https://zan.kz/ru			
7	Scientific Electronic Library	https://elibrary.ru/			
8	Open Library	https:// kitap.kz/			
9	Thomson Reuters	www.webofknowledge.com			
10	ScienceDirect	http://www.sciencedirect.com			
11	Scopus	https://www.scopus.com/			
12	Digital library «Aknurpress»	https://aknurpress.kz/login			

ОЙТÚSTIК-QAZAQSTAN MEDISINA АКАДЕМІАSY «Оңтүстік Қазақстан медицина академиясы» АҚ	цинская академия»
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#### **12.** Course policy

Requirements for studying this course:

- 1. Do not miss classes without reason;
- 2. Do not be late for classes;
- 3. Come to classes in uniform;
- 4. To be active during the practical classes;
- 5. To prepare for lessons;
- 6. Take the students independent work and prepare it timely;
- 7. Not to do other things during lessons;
- 8. To be tolerant, polite and friendly to students and teachers;
- 9. Be careful to the department equipment and furniture.

10. The midterm control of students' knowledge is carried out twice during the semester on the 7th and 14th weeks of theoretical training with the setting of the results of midterm controls in the educational journal of progress and the electronic journal, taking into account penalty points for missing lectures (missed lectures in the form of penalty points are subtracted from the assessments of the midterm control). The penalty point for missing 1 lecture is 1.0 point. A student who does not show up for midterm control without an important reason is not allowed to take the course exam. The results of midterm control are sent to the dean's office in the form of a report at the end of the control week.

11. SIW mark is given at the SIWT lesson, according to the schedule, in the educational register and electronic register also, taking into account the penalty points for missing SIWT lessons. The penalty point for missing 1 SIWT lesson is 2.0 points.

12. Digital educational resources and digital content are placed by the teacher in the "Tasks" module for the attached academic group (stream). All types of training videos are linked to the department's cloud storage. 13. Module "Tasks" AIS Platonus is the main platform for distance learning and placement of all training and teaching materials.

13. Academic policy based on the moral and ethical values of the academy	
https://ukma.kz/	
Академическая политика АО ЮКМА. П. 4 Кодекс чести студента <u>http://surl.li/eroik</u>	
The policy of grading the discipline	
Discipline Grading Policy	
Student's final mark (FM) is given at the end of the course, and calculate as a sum of the admission	m
rating mark (ARM) and the final control mark (FCM) and is given according to the point-ration	ıg
letter system.	
FM=ARM+FCM	
Admission rating mark (ARM) is equal to 60 points or 60% and includes: the current control man	:k
(CCM) and midterm control mark (MCM).	
The current control mark (CCM) is the average score for practical lessons and SIW.	
The midterm control mark (MCM) is the average score of the two midterm controls.	
The admission rating mark (60 points) is calculated via the formula:	
MCM average x 0.2+CCM average x 0.4	
Final control (FC) is carried out in the form of testing and the student can get 40 points or 40% of	of
the total mark.	
When testing, the student is asked 50 questions.	
Calculation of final control is carried out as follows: If the student correctly answered 45 question	IS
out of 50, it will be 90%.	
90 x 0.4 = 36 points.	
The final mark is calculated if the student has positive marks both in the admission rating (AR) = 3	60

points or 30% or more, and in the final control (FC) = 20 points or 20% or more.

ойтústiк-Qazaostan МЕДІЗІХА АКАДЕМІАSY «Оңтүстік Қазақстан медицина академиясы» АҚ	цинская академия»
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	The fin A student who has average) is not allowe Penalty points are s	al grade $(100 \text{ points}) = N$ received an unsatisfactor d to the exam. ubtracted from the avera	MCM $_{average} \ge 0.2 + CCM _{average} \ge 0.4 + F$ ry mark for one of the types of contro age score of the current control.	C x 0.4 ls (MK1, MK2, CC
14.	Approval and revis	sion	2	/
	Approval date	Protocol No.	Head of the Department	Signature
«26	» <u>01</u> 202 <u>3</u> у.	№ <u>[2</u>	M.B.Ivanova	A
	<b>Revision date</b>	Protocol No.	Chairman of the EPC	Signature
«15	» 06 202 3 y.	Nº <u>11</u>	ZH.S. Toxsanbayeva	milies
	<b>Revision date</b>	Protocol No.	Chairman of the EPC	Signature
«	»202y.	№		
	<b>Revision date</b>	Protocol No.	Chairman of the EPC	Signature
«	»202y.	Nº		

ОЙТÚSTIK-QAZAQSTAN MEDISINA АКАДЕМІАSY «Оңтүстік Қазақстан медицина академиясы» АҚ	цинская академия»
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## Protocol of approval of the subject "ICT" with other subjects for the 2023-2024 academic year

Coordination disciplines	Proposals for changes in the proportions of the material, the order of presentation, etc.	Protocol numbers and meeting dates of the corresponding departments
1	2	3
1. Biophysics	The ICT course deals with the processing of numerical data and their visualization through the use of Excel spreadsheets, Statistica. The content and sequence of presentation of the material on the ICT discipline is considered appropriate	Reviewed at the meeting of the Department of Medical Biophysics and IT Protocol № 2 "46" 05 202 y. Head of the Department to Ph.D., ass. professor Ivanova M.B.

Head of the Department Medical Biophysics and IT, PhD, ass. Professor M.B. Ivanova