АКАДЕМІАSY АСАДЕМҮ «Оңтүстік Қазақстан медицина академиясы» АҚ АО «Южно-Казахстанская медицинская академия»	
Departments: "Medical Biophysics and Information Technologies", № 35-11 (Б)-2024	4
"Social health insurance and public health" № 58 - 12 - 2024	1 >
Syllabus of the subject "Introduction to Scientific Research"       1 page out of 28	0

## Syllabus

Departments: "Medical Biophysics and Information Technologies", "Social health insurance and public health" Work program of the subject "Introduction to scientific research" Educational program 6B10115 "Medicine"

1.	General information about the subject		
1.1	Subject codes: ISR 2212	1.6	Academic year: 2024-2025
1.2	Subject name: Introduction to scientific research	1.7	Year: 2
1.3	Prerequisites: ICT, introduction to specialty	1.8	Semester: 4
1.4	Postrequisites: Hygiene and Epidemiology, Mandatory Social Health Insurance and Medical Law	1.9	Number of credits (ECTS): 6
1.5	Cycle: BD	1.10	Component: UC
2.	Subject description	1. 0	H. B. Com H. 13

Integrated Discipline: study of public health policies in the Republic of Kazakhstan. Examination of international and national healthcare structures, the role, and responsibility of the healthcare system in addressing issues of medical care delivery to the population. Application of healthcare regulatory acts in practical activities. Development of practical skills in using methods of descriptive statistics and hypothesis testing theory in biomedical research, as well as processing statistical data using specialized software.

3.	Summative assessment form		
3.1	Testing (MCQs)	3.5	Coursework
3.2	Writing	3.6	Essay
3.3	Oral	3.7	Project
3.4	OSPE (objective structured practical exam)	3.8	Other (specify)
		1	

## 4. Subject objectives

Formation of theoretical knowledge in biostatistics and public health – strategies and policies, medical ethics, and ethics of scientific research. Development of skills in applying basic ethical principles in professional activities, fundamentals of medical legislation, methods of statistical processing of medical data, working with application software, as well as skills in scientific analysis, critical thinking, and their practical application.

5.	Subject learn	ing outcomes							
L01.	Demonstrates knowledge of organization, planning, and management in public health, applying rules for organizing international cooperation in healthcare and methods of biostatistics.								
LO2.	Applies knowledge of the fundamentals of scientific research for formulating hypotheses, setting research goals and objectives, selecting research methods, and conducting information searches to prepare a literature review.								
LO3.	Selects the mo	ost appropriate statistical procedures for describing medical research data.							
LO4.	Uses statistical methods, including the STATISTICA software package, to describe medical data on morbidity, disability, and mortality, considering demographic and population health indicators.								
LO5.	Integrates knowledge of deontological principles with medical legislation, effectively applying the principles of ethics in relationships between patients and healthcare professionals.								
5.1	Subject LO	The subject learning outcomes linked with educational program learning outcomes							
ina	LO 1 LO 4	LO 1. Applies in practice fundamental knowledge in the field of biomedical, clinical, epidemiological and socio-behavioral sciences.							
STSKI	LO 5	LO 3. Carries out its activities within the framework of the legislation of the Republic of Kazakhstan in the field of healthcare to ensure high-quality medical care.							
A	LO 3	LO 3 LO 7. Complies with the norms of public health protection, sanitary and hygienic regime and labor safety standards in healthcare organizations, epidemiological safety of the environment.							
H	LO 2	LO 9. It works in the electronic databases of the healthcare system of the Republic of							

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6.1	Biostatistics		10.0		V.	5.0		Nº VI	St
egn J.K.	Venue: South Kazakhs Technologies. Al-Fara <b>Public health</b> Venue: South Kazakh Health. Al-Farabi Squ	stan Medical Ac bi Square - 1, 5 <sup>1</sup> stan Medical A are - 3b, 2 <sup>nd</sup> floc	ademy, mai <sup>th</sup> floor, roor cademy, 4 <sup>th</sup> or, rooms No	n building, 1 ns No. 500- <sup>1</sup> building, 1 5. 1-9. Phon	Departm 511. Pho Departm e 121, 1	ent of Me one 39-57 ent of So 22.	dical Biophy -57, add 106 cial Health I	ysics and Info 53. Insurance and	rmation 1 Publie
6.2	Number of hours	Lectures	F	Practical clas	sses	SIW	T S	SIW	2 21
	Biostatistics	6	Sp. K	24	Sec.	9	S. 1	510	60
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6.3	Subject study plan	st de	2 CV 1	J' vi	St.	2.	20, 14	1 21	2
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12	12 day 3 week		3	C AN	1	GL-	6 Pul	blic health	2.1
13	14 <sup>th</sup> day 3 <sup>rd</sup> week		6 3				$7 \qquad Pul$	blic health	1 5
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8.	Thematic plan	de la la	J' vi	St a	0. 6		VI de	·	0
Da y	Topic	SKII Bri	ief content	L SKI	Subj ect LO	Numbe r of hours	Forms/ Methods Technolog of learning	/ Fo s/ Meth gies asses	rms/ 10ds of ssment
1.9	Lecture Introduction to biostatistics. Stages of statistical research.	Introduction Definition of of biostatistics Stages of	to bi biostatistics in medicin statistical	ostatistics. . The role e. research.	LOI	Stra	Lecture- information Presentation	Feedb n / (quick n question	ack oning)

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, K1 , K1	Practical class Introduction to biostatistics.	Research program and plan. Data collection. Data processing. Analysis, conclusions, suggestions. Basic concepts and definitions. Types of statistical data. Basic types of measuring scales. Stages of statistical research.	LO 1 LO 3	SKMO 35tr	Practice	Oral questioning. Practical work. (assessment using
11. 5×17 41. 41.	SIWT/SIW Consultation on the implementation of an individual task 1 / History of the development of biostatistics / Organizing project groups, selection project topics	Stages of the formation of science. Famous scientists in the field of biostatistics.	LO 1	2 1/5 1/5 5400 5400 5400	Individual t 1 <i>PjBL</i> <i>Round table</i>	checklist). ask Logical flowchart (assessment using checklist)
	discussing PjBL methodological recommendations, organizing a Trello workspace Lecture Descriptive statistics.	Introduction to descriptive statistics. Frequency distribution. Histograms. "Stem and leaf". Measures of central tendency and dispersion. Data visualization. "Box and Whiskers"	LO 1	a.edu a.edu K <sup>na.</sup> ev K <sup>na.</sup> ev K <sup>na.</sup> ev K <sup>na.</sup> ev K <sup>na.</sup> ev	Lecture- information Presentation	Feedback (quick questioning)
3. ec , m <sup>2</sup> , k <sup>1</sup>	Practical class Frequency distribution.	Frequency distribution and its numerical characteristics. Graphical representation of frequency distribution. Introduction to the STATISTICA program (the "Descriptive statistics" procedure)	LO 1 LO 3	2.2013.12 12.2011	Computer- based work Solving situational tasks.	/ Oral questioning. Practical work. (assessment using checklist).
	SIWT/SIW Consultation on the implementation of an individual task 2 / Creating an interval frequency distribution / Stage 1. Goal setting. Definition (specification) of the problem, setting goals, objectives, hypotheses, choosing a project product	Calculation of the number of intervals, their width and limits. Sorting data. Frequency analysis.		2 1/5 2	Individual t 2 PjBL "Round tab brainstormi SWOT-anal	ask Solving problems (assessment using checklist) Monitoring project ing, progress on lysis Trello
3.	Lecture	The specifics of the occurrence of	LO 1	1	Lecture-	Feedback

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5	Syn	abus of the subject introduction to Scienti	Ine Resea		CON Fr	4 page out of 28
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	Normal distribution. Basics of the theory of statistical hypothesis testing. Goodness-of- fit tests.	normal distribution in the context of biology and medicine. Properties of normal distribution. Key concepts and definitions of the theory of statistical hypothesis testing. Procedure for testing statistical hypotheses. Types of errors in hypothesis testing. Pearson's goodness-of-fit test. Kolmogorov- Smirnov's goodness-of-fit test.	2. 2. 2 201. 2 201. 2 201. 2 201. 2 201. 2 201. 2 201. 2 201. 2 2 201. 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	SKM8 SKM8 SKM8 SKM8 SKM8 SKM8 SKM8 SKM8	information Presentation	n (quick questioning)
SKN FL	<b>Practical class</b> Basics of the theory of statistical hypothesis testing. Goodness-of- fit tests.	Hypothesis testing of the normal distribution of a sample. Pearson's goodness-of-fit test. Kolmogorov- Smirnov's goodness-of-fit test. Hypothesis testing of the normal distribution of a sample in the STATISTICA program.	LO 1 LO 3 LO 4	na. skine	Computer- based work Solving situational tasks.	/ Oral / questioning. Practical work. (assessment using a checklist).
, ed	SIWT/SIW Acceptance of SIW1 /Consultation on the implementation of an individual task 3 / Calculation of numerical characteristics of an interval frequency distribution, its graphi- cal representation. / Stage 2. Planning. Planning the implementation of the project, describing the required product that satisfies the set goals, searching for means of	Calculation of numerical characteristics of an interval frequency distribution (mean, variance, standard deviation, range, coefficient of variation), its graphical representation (polygon, histogram, box plot, stem-and-leaf plot).		kina kina kina kina kina kina kina kina	Individual t 3 <i>PjBL</i> <i>Brainstorm</i> <i>responsibili</i> <i>distribution</i> <i>matrix</i> , <i>Gantt chart</i> "road map	ask Solving problems (assessment using a checklist) <i>Monitoring</i> <i>project</i> <i>progress on a</i> <i>Trello</i>
4. 	<i>project</i> Lecture         Parametric methods of comparative statistics	Difference between parametric and nonparametric statistical tests. Fisher test. Two-sample t-test. Paired Student's t test. One sample t- test. One-way analysis of variance	LO 1	5K9 3K9 1 SK9	Lecture- information Presentation	Feedback (quick questioning)
200° 10° 1400 1400 1400	<b>Practical class</b> Parametric methods of comparative statistics	Fisher's F-test (comparison of two sample variances). Hypothesis testing for the equality of two means using the t-test for independent samples. One-sample t-test. Hypothesis testing for the equality of two means using the t-test for dependent samples. Implementation of the t-test in the STATISTICA program.	LO 1 LO 3 LO 4	edu.k	Computer- based work Solving situational tasks.	/ Oral questioning. Practical work. (assessment using a checklist).

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<u>, F</u>	Syli	abus of the subject "Introduction to Scienti	nc Resea	rcn	20 VLV	5 page out of 28
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	SIWT/SIW Acceptance of SIW 2 / Consultation on the implementation of an individual task 4 / Goodness of fit tasts /	Hypothesis testing of the normal distribution of a sample. Pearson's goodness-of-fit test. Kolmogorov- Smirnov's goodness-of-fit test.	LO 1 LO 3 LO 4	1/50	Individual t 4	ask Solving problems (assessment using a checklist)
ea. Na.	Stage 3. Project implementation. Working with information sources	Ma.edu.kt. K. S. Skintena. Ma.edu.kt. K. S. Skintena. Skina.edu.kt. S. Skintena. Skina.edu.kt. Skina.edu.kt. K. Skintena. Kt. Skina.edu.kt. K. Skintena. Kt. Skina.edu.kt. K. Skintena.	8.edu 4.n8.e 1. K2.e	sedu.k s.edu.k s.edu.k s.edu.k	<i>PjBL</i> <i>Excursion to</i> <i>the library-</i> <i>information</i> <i>center.</i> <i>Literature</i> <i>review,</i> <i>individual a</i> <i>group</i> <i>consultation</i>	Monitoring project progress on a Trello
5	Lecture Nonparametric methods of comparative statistics	Advantages and disadvantages of nonparametric tests. Mann-Whitney test. Wilcoxon test. Kruskal-Wallis test.	LO 1		Lecture- information Presentation	/ Feedback (quick questioning)
	Practical class Nonparametric methods of comparative statistics	Mann-Whitney test. Wilcoxon test. Implementation of nonparametric tests in the STATISTICA program.	LO 1 LO 3 LO 4		Computer- based work Solving situational tasks.	/ Oral / questioning. Practical work. (assessment using a
9.0. 9.0.	<b>SIWT/SIW</b> Consultation on the implementation of an individual task 5 / Testing the hypothesis of equality of two	Testing the hypothesis of equality of two means using Student's t-test for paired samples. Implementation of Student's t-test in the STATISTICA software.	LO 1 LO 3 LO 4	1/5 J. R. A	Individual t 5	ask Solving problems (assessment using a checklist)
ini St X	means using Student's t-test for paired samples./ Stage 3. Project implementation. Development of questionnaires, survey, primary analysis of the obtained data	2 SKINA. EC. Edu. KL SKINA. SKINA. Edu. KL	Mana SKINA SKINA	ec.edu na.edu skina.e skina.e	PjBL Computer practical we with Google Forms, MS Excel	Monitoring project progress on a Trello
6. 18.9	Lecture Analysis of qualitative variables.	Definition of qualitative variables. Importance of analyzing qualitative variables in medical research. Types of qualitative variables (binary, nominal, ordinal). Construction of contingency tables of size 2x2 and size r x s. Pearson's chi-square test. Fisher's exact test. McNemar's chi- square test.		na.edu.k	Lecture- information Presentation	Feedback (quick questioning)
<u>Y</u>	Practical class	2x2 contingency tables. Pearson's	LO 1	3	Computer-	Oral

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1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	Analysis of qualitative variables.	chi-square test (2x2). Yates' correction, Fisher's exact test. McNemar's chi-square test. Contingency tables of size mxn. Pearson's chi-square test (r x s). Construction of contingency tables and implementation of chi-square tests in the STATISTICA program.	LO 3 LO 4	SKMO KL SKN	based work Solving situational tasks.	<ul> <li>questioning.</li> <li>Practical</li> <li>work.</li> <li>(assessment</li> <li>using a</li> <li>checklist).</li> </ul>
NO. SKI	SIWT/SIW Consultation on the implementation of an individual task 6/ One- way analysis of variance (ANOVA). /Stage 3. Project implementation. Statistical analysis of the obtained data	One-way analysis of variance (ANOVA). Conditions for application. Implementation of ANOVA in the STATISTICA program.	LO 1 LO 3 LO 4	1/5 	Individual t 6 <i>PjBL</i> <i>Computer</i> <i>practical w</i> <i>with MS Ex</i> <i>Statistica 12</i>	ask Solving problems (assessment using a checklist) Monitoring project progress on a cel, Trello
K. Mo	Practical class Correlation analysis.	Introduction to correlation analysis. Pearson correlation coefficient. Interpretation of the correlation coefficient. Assessment of the significance of the correlation coefficient. Spearman's rank correlation coefficient. Implementation of correlation analysis in the STATISTICA program.	LO 1 LO 3 LO 4	a.edu.	Computer- based wor Solving situational tasks.	k / Questioning. Practical work. (assessment using a checklist).
du a.e.	SIWT/SIW Consultation on the implementation of an individual task 6/ One- way analysis of variance (ANOVA). / Stage 3. Project implementation. Statistical analysis of the obtained data	Application scheme. Kruskal-Wallis test.	LO 1 LO 3 LO 4		Individual t 6 <i>PjBL</i> <i>Computer</i> <i>practical w</i> <i>with God</i> <i>Docs, Canv</i>	ask Solving problems (assessment using a checklist) Monitoring project pork progress on a ogle Trello a
	Midterm control 1	Assessment of students' knowledge and skills based on the material covered in lectures, practical classes, and SIWT for topics 1–6.	gu.Kl	I SK	Computer testing, MC	Qs 100-point scale assessment
8.e	Practical class Regression analysis.	Estimation of linear regression parameters using the least squares method. Hypothesis testing for the significance of regression coefficients. Hypothesis testing for the significance of regression equation. Coefficient of determination. Implementation of regression analysis in the	LO 1 LO 3 LO 4	edul na.edu skina	Computer- based wor Solving situational tasks.	k / Questioning. Practical work. (assessment using a checklist).



SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия» № 35-11 (Б)-2024 № 58 - 12 - 2024 Syllabus of the subject "Introduction to Scientific Research" 7 page out of 28

Mar Contraction	STATISTICA program.	, at		· cor	3 411.
SIWT/SIW Acceptance of SIW 3/ Consultation on the completion of individual assignment 7 / Summarizing the material using logical	Odds ratio and relative risk.	LO 3	S1/6	Individual task 7	Logical flowchart (assessment using a checklist)
flowchart. / Stage 4. Project presentation	SKINB. Edu. K. K. SKINB. SKINB. SKINB. SKINB. SKINB. Edu. K. SKINB. SKIN	KIN3.	ug.edn.	PjBL "Round table", public presentation	Assessment according to checklist
Lecture. Public health and healthcare as a science. ntroduction to scientific research.	The main task of public health and healthcare. Modern problems of population health in the countries of the world.The concept of the term "Science" and its classification. Defining the purpose of science in cognition "Public health and healthcare".	LO2	SKING SKING	Introductory	Feedback questions
Practical class Healthcare systems in Kazakhstan. Internati- onal cooperation in healthcare.	Health care in Kazakhstan. Structure of the health care system. Code of the Republic of Kazakhstan. On the health of the people and the health care system	LO3	13. e	Training cases, question and answer	Assessment using a check list
SIW/SIWT Priority areas of public health protection.	Priorities in health care. The strategy "Kazakhstan-2050".	LO5	3/5	Report, presentation, preparation of test tasks	Evaluation criteria for SIW/SIWT
<b>Lecture</b> Modern problems of demography in the Republic of Kazakhstan	Demographic situation in Kazakhstan. Factors affecting demographic indicators. Population construction.	LO1 LO5	edu.	Thematic	Feedback questions
Practical class Methodology of calcu- lation and analysis of medical and demogra- phic indicators.	Indicators of natural population movement. Special demographic indicators.	LO4	no 3 sknol	Training cases, case-study	Assessment interview using a checklist
SIWT/SIW Demographic development of Kazakhstan.	Demographic security of Kazakhstan. Socio-demographic problems in Kazakhstan. Statistical processing of data.	LO1 LO3	1/5	Report, presentation, quizzes and tests	Evaluation criteria for SIW/SIWT
<b>Lecture</b> Population health, morbidity and methods of their study.	Indicators of morbidity. Methods of studying morbidity. Health index.	LO4	eqn,	Overview	Feedback questions
<b>Practical class</b> Modern medical and social problems, health promotion issues.	Disease prevention. Dispenserisation. Screening.	LO5	M3 SKM3	Educ ational cases, case-study	Assessment using a check list

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JU.K	SIWT/SIW Current trends in morbidity of the population of Kazakhstan.	Current state of morbidity. The main causes of diseases.	LO4	1/5	Report, presentation, preparation of test tasks	Evaluation criteria for SIW/SIWT
12	<b>Lecture</b> Disability and its types.	Types of disability. Features of different types of disability.	LO2		Overview	Feedback questions
skn skn	Practical class Organisation and conduct of medical and social expertise (MSE).	Composition of the medical and social commission. Rules for conducting the medical and labour expert commission (VTEK). The rules of organisation of MSE and its stages.	LO1 LO5	2. 80 2. 80 2. 80	Training cases, case-study	Assessment interview using a checklist
du.K	SIWT/SIW Socially significant diseases and their control	Classification of <i>socially</i> significant diseases. Combating socially significant diseases.	LO2	91/5 A	Report, presentation, quizzes and tests	Evaluation criteria for SIWT/SIW
13.	<b>Lecture.</b> Organization of medical care for the population.	Types of medical activities. Levels of medical care. Forms of medical care.	LOI	2011.01	Overview	Feedback questions
	<b>Practical class</b> Medical care and its types.	Types of medical care. Forms of medical care. Organization of specialized medical care.	LO5	3.00	Educational cases, case study	Assessment using a check list
, RL	SIW/SIWT Medical and social aspects of a healthy lifestyle.	Models of a healthy lifestyle: medical, educational, radical political models.	LOI	1/5	Report, presentation, preparation of test tasks	Evaluation criteria for SIW/SIWT
14.	Lecture. Ethics. Medical and ethical aspects of health and disease.	Ethics - goals, objectives and types. Medical and ethical aspects of health. Medical and ethical aspects of the disease.	LO5	1.K1	Thematic	Feedback questions
	<b>Practical class</b> Medical secrecy.	Definitions of the concept of "medical secrecy". Objects of medical secrecy.	LO5	3	Training cases	Assessment using a check list
L J.KL	<b>SIW/SIWT</b> Ethical aspects of immunoprophylaxis of diseases.	Ethics of planning and conducting research in the field of vaccine prevention. The ethics of vaccination.	LO3	1/5	Report, presentation, preparation of test tasks	Evaluation criteria for SIW/SIWT
15.	<b>Practical class</b> The universality of the ethical norm and the uniqueness of moral choice.	The principle of justice. The concept of universality of the ethical norm. Moral choice and morality. The uniqueness of moral choice in medicine.	LO5		Educ ational cases, case-study	Assessment using a check list
	<b>SIWT/SIW</b> Confidentiality and communication with the patient's relatives.	The principle of confidentiality. Basic communication skills. The principle of the patient-centered approach. Iatrogeny and the principle of confidentiality.	LO5	2/6	Report, presentation, preparation of test tasks	Evaluation criteria for SIW/SIWT
r VI	Acceptance of the boundary control 2	Assessment of students' knowledge and skills based on the materials of	1.2.	Stick	Testing	Assessment according to

S «C	Оңтүстік Қазақстан меди	о́мти́stik-qazaqstan MEDISINA AKADEMIASY цина академиясы» АҚ	каzакнsта AL :MY эжно-Каза	N хстанск	ая медицинская ака	демия»
	Departmen	ts: "Medical Biophysics and Information Te "Social health insurance and public health'	chnologie	s",	Nº Nº	35-11 (Б)-2024 58 - 12 - 2024
Y.	Sy	llabus of the subject "Introduction to Scient	tific Resea	rch"	2 2	page out of 28
13	the as south	lectures, practical exercises and slings of 9-15 topics.	1 54	no.	e eu du K	the checklist
16.	<b>Practical task</b> Ethical regulations.	The rights and obligations of medical workers and patients. The Helsinki Declaration, the Nuremberg Code, the Geneva	LO5	5 3 5 5	Educ ational cases, case-study	Assessment using a check list

edu	NI PL SKI	Nuremberg Code	e, the Geneva		Kr Kr	ski ma.	edd w. Kr
E CA CA	<b>SIW/SIWT</b> Moral, legal and organizational aspe of transplantation.	//SIWT al, legal and nizational aspects ansplantation.		LO1 1/6 LO5		Report, presentation, preparation of test tasks	Evaluation criteria for SIW/SIWT
Exan	n preparation and co	onducting	the contraction of the	1. 1	18		14131
9.	Teaching metho	ods and controls forms	at do eo		.1.	K11 23.	an Kr 2
9.1	Lectures	Biostatistics Lecture-information / Public health Introductory. Overvie	Presentation / Quiclew. Thematic. Problem	k survey matic.	edu, Kl	2 skning.	3.edu.k.k
9.2	Practical classes	Biostatistics Computer-based work (assessment using a c Public health Training cases, TBL checklist	k / Solving situationa hecklist). case-study, question-a	l tasks / and-ansv	Oral ques wer, Asse	stioning. Practic	al work. v using a
9.3	SIWT/SIW	Biostatistics Individual task / Logi Project-Based learnin - "Round table", bra. Gantt chart, "road m individual and group - Monitoring project - Computer practical - Public presentation Public health Report, presentation,	c flowchart. Solving ng instorming, SWOT-ar ap", excursion to the consultations; progress on a Trello; work; (assessment accordin test preparation, Eval	problem nalysis, i library 1g to cha	ns (assessi responsib -informati ecklist) Criteria fo	ment using a ch ility distribution ion center. Liter or SIWT/SIW	xcklist) matrix, ature review,
9.4	Midterm control	Midterm control 1 - Computer testing, MC Midterm control 1 - testing	<b>Biostatistics</b> CQs (100-point scale <b>Public health</b>	assessm	ient)	KUUS. Edu.	U.K. S. SK
10.	Evaluation Crit	eria	1 24. 00.	200	14	3 10 - 2	P. Ch. Kr
10.1	Criteria for eva	luating module learnin	ig outcomes	3. 0	N. K	2. Mil	2. du. 1
LO	Name of learning outcomes	Unsatisfactory	Satisfactory	ma.	Goo	der	Excellent
SKAN A A	Demonstrates knowledge of the organization, planning and management in public health,	<ol> <li>it is difficult to define basic terms;</li> <li>does not formulate management principles;</li> <li>can't tell the types</li> </ol>	<ol> <li>can define basic terms;</li> <li>formulates the principles of management;</li> <li>can't tell the type</li> </ol>	1) f bas 2) f prin ma s 3) c	formulate sic termine formulate nciples of nagement can tell th	s the 1) for ology; basi s the 2) for prin ; mar e types 3) c	ormulates the c terminology; ormulates the ciples of agement; an tell the types

Kr	Depart	tments: "Medical Biophysi "Social health insura Syllabus of the subject '	cs and Information Techno nce and public health" 'Introduction to Scientific 1	ologies", Research"	№ 35-11 (Б)-2024 № 58 - 12 - 2024 10 page out of 28
1. N. edi	applying the rules of the organization of international cooperation in the field of health and biostatistics methods.	of planning; 4) does not formulate some methods of visual representation of data;	of planning; 4) does not formulate some methods of visual representation of data; 5) does not formulate the basic principles of working with the ASP "STATISTICA"	of planning; 4) does not formulate some methods of visual representation of data; 5) formulates the main methods of comparative statistics and communication assessment; 6) does not formulate the basic principles of working with the ASP «STATISTICA»	of planning; 4) formulates some methods of visual representation of data; 5) formulates the main methods of comparative statisti and communication assessment; 6) formulates the ba principles of workin with the ASP «STATISTICA»
2 50. 50. 50. 50. 50. 50. 50. 50. 50. 50.	Operates with knowledge of the basics of scientific research to formulate a hypothesis, set goals and objectives of research, choosing methods of scientific research and searching for information to compile a literary review.	<ol> <li>does not formulate a research hypothesis;</li> <li>does not know how to search for information to compile a literary review;</li> <li>does not know how to formulate the basic requirements for the formulation of a scientific research hypothesis;</li> </ol>	<ol> <li>is able to search for information to compile a literary review;</li> <li>does not know how to formulate a research hypothesis;</li> <li>does not formulate the types of research;</li> <li>it is difficult to answer about the basic requirements for the formulation of a scientific research hypothesis.</li> </ol>	<ol> <li>interprets what scientific research methods exist;</li> <li>explains the main stages of scientific research;</li> <li>formulates a scientific research hypothesis;</li> <li>does not know how to use traditional library catalogs and databases, as well as perform online searches.</li> </ol>	<ol> <li>is able to search for information to compile a literary review;</li> <li>formulates hypotheses by choosing methods of scientific research;</li> <li>formulates the basic requirements for the formulation a scientific research hypothesis;</li> <li>can competently use traditional libra catalogs and databases without logical conflicts an speech errors.</li> </ol>
3 3 3 3 3 4 1 3 4 1 3 4 1 3 4 1 3 4 1 3 4 1 3 4 1 3 4 1 1 3 1 1 3 1 1 1 1	Selects the most appropriate statistical procedures for describing medical research data.	<ol> <li>makes mistakes when choosing statistical indicators and parameters to describe statistical aggregates;</li> <li>makes mistakes when choosing methods for visual representation of data;</li> <li>it is difficult to choose the necessary method to solve a specific problem;</li> </ol>	<ol> <li>selects some statistical indicators and parameters to describe statistical aggregates;</li> <li>defines some methods of visual representation of data;</li> <li>does not classify parametric and nonparametric methods for estimating the relationship between variables</li> </ol>	<ol> <li>selects the main statistical indicators and parameters for describing statistical aggregates;</li> <li>defines the main methods of visual representation of data;</li> <li>formulates an algorithm for choosing the necessary method to solve a specific problem;</li> <li>Classifies parametric and nonparametric</li> </ol>	<ol> <li>selects all the necessary statistica indicators and parameters to describe statistical aggregates;</li> <li>defines various methods of visual representation of data;</li> <li>formulates an al- gorithm for choosin the necessary meth to solve a specific problem;</li> <li>Classifies para- metric and nonparametric methods of</li> </ol>

ONTUSTIK-QAZAOSTAN 0000 SOUTH KAZAKHSTAN MEDISINA **SKMA** MEDICAL мерізіна АКАДЕМІАSY «Оңтүстік Қазақстан медицина академиясы» АҚ АСАРЕМУ АО «Южно-Казахстанская медицинская академия» Departments: "Medical Biophysics and Information Technologies", № 35-11 (Б)-2024 "Social health insurance and public health" № 58 - 12 - 2024 Syllabus of the subject "Introduction to Scientific Research" 11 page out of 28 comparative comparative statistics: statistics; 5) does not classify 5) Classifies parametric and parametric and nonparametric nonparametric methods for methods for estimating the estimating the relationship between relationship between variables variables 1) is able to calculate It uses statistical 1) does not formulate 1) formulates how to 1) formulates how to 4 methods, how to calculate calculate calculate demographic and including the demographic and health indicators of demographic and demographic and STATISTICA health indicators of health indicators of health indicators of the population: the population; the population; the population; 2) is able to calculate software package, to 2) makes gross 2) makes mistakes in 2) makes mistakes in and evaluate describe mistakes in calculating and calculating and indicators and medical data on calculating and evaluating indicators evaluating indicators parameters of morbidity, evaluating indicators and parameters of and parameters of statistical aggregates disability and and parameters of statistical aggregates statistical aggregates 3) can answer about mortality, taking statistical aggregates 3) it is difficult to 3) can answer about morbidity, disability into account 3) has no skills to answer about morbidity, disability 4) knows how to work with the morbidity, disability 4) knows how to work with the demographic and health program 4) knows how to work with the program STATISTICA indicators of the work with the program STATISTICA program population. **STATISTICA** 5) interprets the results of the decision **STATISTICA** 5) interprets the 5) makes mistakes in results of the interpreting the decision results of the decision Integrates 1) it is difficult to 1) formulates about 1) can list the 1) formulates what is 5 knowledge of answer about the the difference principles of medical included in the the principles of difference between between medical ethics: concept of health ethics and deontology with medical ethics and 2) formulates about ethics: medical deontology; deontology. ethical principles; 2) formulates the 2) does not know legislation, 2) interprets the basic 3) formulates a code basic principles of of ethics for effectively how to formulate the principles of medical medical ethics and principles of medical applying the ethics and healthcare; deontology;

deontology;

principles of

and apply the

3) cannot integrate

knowledge of the

deontology with

medical legislation

principles of ethics;

the principles of

medical ethics

4) does not formulate

principles of

ethics of the

relationship

between the

patient and

healthcare

professionals.

ethics;

3) cannot apply the

between the patient

the relationship

and employees;

principles of ethics of

3) formulates a code

of ethics for

principles of

and apply the

4) can integrate

deontology with

medical legislation

principles of ethics;

5) applies the principles of ethics of the relationship between the patient and the

knowledge of the

healthcare;

4) knows about the

difference between

medical ethics and

5) cannot integrate

knowledge of the

deontology with

medical legislation

principles of ethics;

deontology.

principles of

and apply the



SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия» № 35-11 (Б)-2024 № 58 - 12 - 2024

Syllabus of the subject "Introduction to Scientific Research"

12 page out of 28

3		emplo	yee
10.2	2. Assessment Criteria of teaching methods and technologies	0~ . V	2 2 1/1
Bios	statistics	<i>. Yr.</i>	VI ST. C
Che	cklist for practical class		N' VI GH
N⁰	Assessment Criteria	Points	Mark
-01	1. Oral survey	<u></u>	Max 20
P	<ul> <li>Knows the basic terms and definitions on the topic under consideration.</li> <li>Knows the basic formulas or algorithm of a certain statistical procedure.</li> </ul>	En Kind.	a.edu
	profession, gives specific practical examples.	SKI	13. edu.
54	- Refers to additional literary sources when answering, has an additional summary, analyzes medical publications.	18-20	Excellent
2	<ul> <li>Knows the basic terms and definitions on the topic under consideration.</li> <li>Knows the basic formulas or algorithm of a certain statistical procedure.</li> <li>Able to determine the relationship of the topic under consideration with the future profession, gives specific practical examples.</li> </ul>	15-17	Good
3	<ul> <li>Knows the basic terms and definitions on the topic under consideration.</li> <li>Knows the basic formulas or algorithm of a certain statistical procedure.</li> </ul>	10-14	Satisfactory
40	<ul> <li>Does not know the terms and definitions on the topic under consideration.</li> <li>Does not know formulas on the topic under consideration</li> </ul>	0-9	Unsatisfactory
2	2. Solving situational problems	A N	<b>Iax 40</b>
A St A	<ul> <li>Correctly chooses the statistical method for the solution.</li> <li>Properly groups data.</li> <li>Correctly chooses formulas for calculations.</li> <li>Compiles calculation tables correctly.</li> <li>Makes calculations correctly.</li> <li>Correctly interprets the result.</li> </ul>	35-40	Excellent
2	<ul> <li>Correctly chooses the statistical method for the solution.</li> <li>Properly groups data.</li> <li>Correctly chooses formulas for calculations.</li> <li>Compiles calculation tables correctly.</li> <li>Makes minor errors in calculations.</li> <li>Makes minor errors when interpreting results.</li> </ul>	30-34	Good
3	<ul> <li>Correctly chooses the statistical method for the solution.</li> <li>Makes mistakes when grouping data.</li> <li>Correctly chooses formulas for calculations.</li> <li>Compiles calculation tables correctly.</li> <li>Makes mistakes in calculations.</li> <li>Makes minor errors when interpreting results.</li> </ul>	15-29	Satisfactory
4	<ul> <li>Incorrectly chooses the statistical method for the solution.</li> <li>Makes mistakes when grouping data.</li> <li>Makes mistakes when compiling calculation tables.</li> <li>Makes mistakes in calculations.</li> <li>Doesn't know how to interpret the result.</li> </ul>	0-14	Unsatisfactory
0	3. Practical work	5.10	Max 40
	<ul> <li>Creates a spreadsheet of the right size.</li> <li>Correctly enters data into a spreadsheet.</li> <li>Correctly selects statistical procedures and conducts analysis.</li> <li>Correctly interprets the result.</li> <li>Correctly saves the spreadsheet and workbook.</li> </ul>	35-40	Excellent
2	<ul> <li>Creates a spreadsheet of the right size.</li> <li>Correctly enters data into a spreadsheet.</li> </ul>	30-34	Good

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Υŗ	Syllabus of the subject "Introduction to Scientific Research"	13	page out of 28
1	<ul> <li>Correctly selects statistical procedures and conducts analysis.</li> <li>Finds it difficult to interpret the result.</li> <li>Correctly saves the spreadsheet and workbook.</li> </ul>	JU. K.	SKI. SKINS.
3.	<ul> <li>Creates a spreadsheet of the right size.</li> <li>Correctly enters data into a spreadsheet.</li> <li>Finds it difficult to choose a statistical procedure and conduct an analysis.</li> <li>Finds it difficult to interpret the result.</li> <li>Correctly saves the spreadsheet and workbook.</li> </ul>	15-29	Satisfactory
40	<ul> <li>Finds it difficult to create a spreadsheet of the right size.</li> <li>Makes mistakes when entering data into a spreadsheet.</li> <li>Finds it difficult to choose a statistical procedure and conduct an analysis.</li> <li>Finds it difficult to interpret the result.</li> <li>Does not distinguish between saving a workbook and a spreadsheet.</li> </ul>	0-14	Unsatisfactory
Ch	ecklist for SIW	90. K	I St. no
N⁰	Assessment Criteria	Points	Mark
Ind	ividual task 1. Logic flowchart	<u>v ev</u>	Max 20
1.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00	<ul> <li>The flowchart is simple and concise, placed on one page;</li> <li>Basic and sufficient concepts on the topic (section) are selected as elements of the flowchart;</li> <li>Elements of the flowchart are located 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 elements of the flowchart (inside the flowchart and external, i.e. interconnection with adjacent flowcharts);</li> <li>The flowchart is visual (easy to read): symbols, graphic material, color shades, tables, illustrated material are used.</li> </ul>	18-20	Excellent
2.	<ul> <li>The flowchart is placed on one page;</li> <li>Basic and sufficient concepts on the topic are selected as elements of the flowchart;</li> <li>The hierarchy of the elements of the flowchart is not traced, the material is presented chaotically;</li> <li>Logical connections are established between the elements of the flowchart (inside the flowchart and external, i.e. interconnection with adjacent flowcharts);</li> <li>The flowchart is not illustrative.</li> </ul>	11-17	Good
3.	<ul> <li>The flowchart is located on more than one page;</li> <li>Elements of the flowchart are not basic and sufficient concepts on the topic;</li> <li>The hierarchy of the elements of the flowchart is not traced, the material is presented chaotically;</li> <li>No logical ones are installed between the elements of the flowchart;</li> <li>The flowchart is not illustrative.</li> </ul>	1-10	Satisfactory

## <sup>1</sup>Logic flowchart

The purpose of drawing up a logic flowchart is to form the integrity, consistency and consistency of knowledge. *Algorithm for constructing the logic flowchart:* 

- reading the topic (section);

- analysis of the text, select the main and secondary thoughts and concepts. Write out the basic concepts and categories;
- repeated revision of the text in order to select the links between concepts and categories;
- selection of the most general concepts and categories;
- construction of a flowchart taking into account the identified relationships;
- final review of the text in order to compare it with the received scheme;
- final clarification of the scheme.

о́́́нтú́stik-oazaostan MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ SOUTH KAZAKHSTAN MEDICAL ACADEMY AO «Южно-Казахстанская медицинская академия» Cdbo SKMA 11 Departments: "Medical Biophysics and Information Technologies", № 35-11 (Б)-2024 "Social health insurance and public health" № 58 - 12 - 2024 Syllabus of the subject "Introduction to Scientific Research" 14 page out of 28 Unsatisfactory 4. - The flowchart has not been completed. 0 Individual task 2. Max 40

1.y	<ul> <li>The number of intervals is correctly determined;</li> <li>The width and initial value of the first interval are correctly determined;</li> <li>The data is grouped correctly by intervals;</li> <li>The interval frequency distribution is correctly constructed;</li> </ul>	36-40	Excellent
2.	<ul> <li>Frequency analysis has been carried out.</li> <li>The number of intervals is correctly determined;</li> <li>The width and initial value of the first interval are correctly determined;</li> <li>Errors were made when grouping data by intervals;</li> <li>The interval frequency distribution was constructed with minor errors.</li> <li>Frequency analysis has been carried out.</li> </ul>	30-35	Good
3.	<ul> <li>The number of intervals is incorrectly determined;</li> <li>The width and initial value of the first interval were incorrectly determined;</li> <li>Errors were made when grouping data by intervals;</li> <li>An interval frequency distribution has been built;</li> <li>Frequency analysis was carried out incorrectly.</li> </ul>	1-29	Satisfactory
4.	- The task was not completed.	0	Unsatisfactor
Indi	ividual task 3.		Max 40
T. C	<ul> <li>Numerical characteristics of the frequency distribution (mean, variance, standard deviation, range, coefficient of variation) are calculated correctly;</li> <li>The interval frequency distribution is correctly presented graphically: a polygon, a histogram, a "box with whiskers", a "stem with leaves" are constructed;</li> <li>The solution was checked in the STATISTICA program, a screenshot is attached.</li> </ul>	36-40	Excellent
2.	<ul> <li>When calculating the numerical characteristics of the frequency distribution, minor errors were made, which were corrected by the student during testing;</li> <li>Errors were made when constructing some graphs;</li> <li>The solution was checked in the STATISTICA program, a screenshot is attached.</li> </ul>	30-35	Good
3.)	<ul> <li>When calculating the numerical characteristics of the frequency distribution, gross errors were made;</li> <li>The graphs were built with errors;</li> <li>There is no screenshot of the solution in the STATISTICA program.</li> </ul>	1-29	Satisfactory
4.	- The task was not completed.	0	Unsatisfactor
2	SIW2	5	Mrs 2.65
Indi	ividual task 4.	V 9	Max 100
12 3 9 3 Y	<ul> <li>The probabilities of intring a random variable in the intervals are correctly determined;</li> <li>A calculation table was created to determine the calculated value of Pearson's χ2-goodness-of-fit test;</li> <li>The hypothesis about the normal distribution of the sample was tested in accordance with the algorithm of Pearson's χ2- goodness-of-fit test;</li> <li>The result of the decision is interpreted correctly.</li> <li>The values of the theoretical distribution function of a random variable are correctly determined;</li> <li>A calculation table was created to determine the calculated value of Kolmogorov-Smirnov's λ- goodness-of-fit test;</li> <li>The hypothesis about the normal distribution of the sample was tested in accordance with the algorithm of Kolmogorov-Smirnov's λ- goodness-of-fit test;</li> <li>The result of the decision is interpreted correctly.</li> </ul>	90-100	Excellent
2. °	<ul> <li>Minor mistakes were made in determining the probabilities of a random variable falling into intervals;</li> <li>The calculation table for determining the calculated value of Pearson's χ2- goodness-of-</li> </ul>	70-89	Good

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	"Social health insurance and public health"	S Ng	258 - 12 - 2024
Ϋ́	Syllabus of the subject "Introduction to Scientific Research"	15	page out of 28
1 9 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<ul> <li>The hypothesis about the normal distribution of the sample was tested in accordance with the algorithm of Pearson's χ2-goodness-of-fit test;</li> <li>The result of the decision is interpreted correctly.</li> <li>Minor mistakes were made when calculating the values of the theoretical distribution function of a random variable;</li> <li>The calculation table for determining the calculated value of the Kolmogorov-Smirnov λ- goodness-of-fit test contains minor mistakes;</li> <li>The hypothesis about the normal distribution of the sample was tested in accordance with the algorithm of Kolmogorov-Smirnov's λ-goodness-of-fit test;</li> <li>The result of the decision is interpreted correctly.</li> <li>Mistakes were made in determining the probabilities of a random variable falling into intervals;</li> <li>The calculation table for determining the calculated value of Pearson's χ2- goodness-of-fit test contains mistakes;</li> <li>The hypothesis about the normal distribution of the sample according to Pearson's χ2-goodness-of-fit test is tested incorrectly;</li> <li>The result of the solution is interpreted incorrectly;</li> <li>Mistakes were made when calculating the values of the theoretical distribution function of a random variable;</li> <li>The result of the solution is interpreted incorrectly;</li> <li>Mistakes were made when calculating the values of the theoretical distribution function of a random variable;</li> <li>The calculation table for determining the calculated value of Kolmogorov-Smirnov's λ-goodness-of-fit test contains mistakes;</li> <li>The calculation table for determining the calculated value of Kolmogorov-Smirnov's λ-goodness-of-fit test contains mistakes;</li> <li>The calculation table for determining the calculated value of Kolmogorov-Smirnov's λ-goodness-of-fit test contains mistakes;</li> <li>The calculation table for determining the calculated value of Kolmogorov-Smirnov's λ-goodness-of-fit test contains mistakes;</li> <li>The hypothesis about the normal distribution of the sample acco</li></ul>		Satisfactory
4.	<ul> <li>The result of the solution is interpreted incorrectly;</li> <li>The hypothesis about the normal distribution of the sample was not tested using the Pearson and Kolmogorov-Smirnov goodness-of-fit tests.</li> </ul>	0,1	Unsatisfactory
Í	SIW 3	00	Fr. St. C
Ind	lividual task 5.	S N	Max 40
10 0.0 0.0	<ul> <li>The null and alternative hypotheses are correctly formulated;</li> <li>The calculated value of the Student's t-test for dependent samples was calculated correctly;</li> <li>The hypothesis was tested according to the Student's t-test algorithm for dependent samples;</li> <li>The result of the decision is interpreted correctly;</li> <li>The solution was checked in the STATISTICA program, a screenshot is attached.</li> </ul>	36-40	Excellent
2	<ul> <li>The null and alternative hypotheses are correctly formulated;</li> <li>The calculated value of the Student's t-test for dependent samples was calculated correctly;</li> <li>The hypothesis was tested according to the Student's t-test algorithm for dependent samples;</li> <li>The result of the decision is interpreted correctly.</li> </ul>	30-35	Good
30	<ul> <li>The null and alternative hypotheses are correctly formulated;</li> <li>Errors were made in calculating the calculated value of the Student's t-test for dependent samples;</li> <li>The hypothesis was tested according to the Student's t-test algorithm for dependent samples;</li> <li>The result of the decision is interpreted incorrectly.</li> </ul>	1-29	Satisfactory
4	- The hypothesis of the equality of the two averages was incorrectly tested using the Student's t-test for dependent samples.	0	Unsatisfactory
Ind	lividual task 6.	m. K	Max 40
1	- Correctly formulated null and alternative hypotheses; - Correctly calculated factor and residual variances;	36-40	Excellent

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∕ «	Оңтүстік Қазақстан	а медицина академиясы» АК АО «Южно-Казахстанская медици	нская ака	демия»
	Depa	"Social health insurance and public health"	Nº Nº	35-11 (Б)-2024 58 - 12 - 2024
K)		Syllabus of the subject "Introduction to Scientific Research"	16	page out of 28
	Kar and	We shall a share we share a sh	1	dr. d.
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	<ul> <li>The hypothesis v</li> <li>The result of the</li> <li>The solution was</li> <li>The hypothesis v</li> <li>The result of the</li> <li>The solution was</li> </ul>	was tested according to the Fisher F-test algorithm; decision is interpreted correctly; s checked in the STATISTICA program, a screenshot was attached; was tested according to the Kruskal-Wallis algorithm; decision is interpreted correctly; s checked in the STATISTICA program, a screenshot is attached.	JU.K. Edu.K	AU.R. SKI
2	<ul> <li>Correctly formu</li> <li>Correctly calculated</li> <li>The hypothesis was a second s</li></ul>	lated null and alternative hypotheses; ated factor and residual variances; was tested according to the Fisher F-test algorithm; decision is interpreted correctly; was tested according to the Kruskal-Wallis algorithm; decision is interpreted correctly;	30-35	Good
3	<ul> <li>Correctly formu</li> <li>Errors were mad</li> <li>The hypothesis v</li> <li>The result of the</li> <li>The hypothesis v</li> <li>The result of the</li> </ul>	lated null and alternative hypotheses; le when calculating factor and residual variance; was tested according to the Fisher F-criterion algorithm; decision is interpreted correctly; was tested according to the Kruskal-Wallis algorithm; decision was interpreted correctly.	1-29	Satisfactory
4	- The task was no	t completed.	0	Unsatisfactory
Ind	ividual task 7. Logi	c flowchart	F	Max 20
1. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	<ul> <li>Basic and suffi flowchart;</li> <li>Elements of the f and specific - in th</li> <li>Logical connect flowchart and exterior</li> <li>The flowchart is illustrated materia</li> </ul>	cient concepts on the topic (section) are selected as elements of the flowchart are located so that their hierarchy is clear (for example, general ne center, on the periphery - auxiliary); ions are established between the elements of the flowchart (inside the ernal, i.e. interconnection with adjacent flowcharts); visual (easy to read): symbols, graphic material, color shades, tables, il are used.	18-20	Excellent
2. 0. 2.	<ul> <li>The flowchart is</li> <li>Basic and suffice</li> <li>The hierarchy of chaotically;</li> <li>Logical connect flowchart and extended</li> <li>The flowchart is</li> </ul>	placed on one page; ient concepts on the topic are selected as elements of the flowchart; f the elements of the flowchart is not traced, the material is presented ions are established between the elements of the flowchart (inside the ernal, i.e. interconnection with adjacent flowcharts); not illustrative.	11-17	Good
3.5	<ul> <li>The flowchart is</li> <li>Elements of the</li> <li>The hierarchy o chaotically;</li> <li>No logical ones</li> <li>The flowchart is</li> </ul>	located on more than one page; flowchart are not basic and sufficient concepts on the topic; f the elements of the flowchart is not traced, the material is presented are installed between the elements of the flowchart; not illustrative.	1-10	Satisfactory
4.	- The flowchart ha	as not been completed.	0	Unsatisfactory
Ch	ecklist for evaluati	ing project work	Ma	a contraction of the second se
Inte	erim evaluation of	the project work	St. d	Max 100
№	Criteria	Description	St	mark
4	Determination of the problem	The problems are clearly formulated, scientifically substantiated and The relevance of the research topic is well-reasoned.	integrate	ed. 15-20
1	The problems are formulated and justified. The relevance of well-reasoned.		rch topic	<sup>is</sup> 10-14
	atu da	The problems are partially formulated, not substantiated. The releva	ance of t	he 50

2	«Оңтүстік Қазақстан	онтизтік-одадасятан MEDISINA АКАДЕМІАSY медицина академиясы» АҚ ОКАДАСКАЗАКНЯТАН МЕДІСАL АСАДЕМУ АО «Южно-Казахстанская медицинская академ	ия»		
	Depa	artments: "Medical Biophysics and Information Technologies", № 35-1	1 (Б)-2024		
Ś		"Social health insurance and public health" № 58 - Syllabus of the subject "Introduction to Scientific Research" 17 pag	- 12 - 2024 e out of 28		
,	K A				
ŀ	SKIII NO. C	The problems are not formulated or superficially formulated. The relevance of the topic is not reflected.	0-4		
<u>.</u>	1 stimo	The goal is formulated clearly and concisely. The objectives of the study are fully consistent with the goal.	15-20		
2	Setting a project goal and	The goal is formulated, but described in too much detail. The objectives of the study correspond to the goal.	10-14		
	achieve it	The goal is vaguely formulated. The objectives of the study partially correspond to the goal.	5-9		
	a.e. du.	The goal is vaguely formulated or not formulated. The objectives of the study do not correspond to the goal.	0-4		
	SKMara.eou	reputable publications are indicated. The links are listed in the text sequentially with the numbers.	15-20		
	1 St. Kno.	The publications/studies published in full-text databases from a limited number of sources are indicated. The links in the text are listed sequentially with numbers.	10-14		
3	Selection and use of literature	and The same type of publications/research published in open access on the Internet are indicated. Full-text databases and reputable publications are practically not used. Most of the sources do not relate to the topic of the project. The links are not specified in the text.			
n N	d.eoc du.k. K.	Full-text databases and reputable publications are practically not used. Most of the sources do not relate to the topic of the project. The links are not specified in the text.	0-4		
, S	mon a edu	Systematic publication of the results of the project work on the Trello board. The interim results of the project are presented on time.	15-20		
41	Timely presentation of	ely entation of Periodic publication of the results of the project work on the Trello board. T			
	interim results	Periodic publication of the results of the project work on the Trello board. The interim results of the project are not presented on time.	5-9		
90	WHI I ST SK	The results of the project work were not published on the Trello board. The interim results of the project are not presented on time.	0-4		
9. G	Personal	According to the interim results, there is a collective creative approach to solving problems, an even distribution of functions and well-coordinated work	15-20		
5	involvement, creative	According to the interim results, there is an even distribution of functions in the team, well-coordinated work	10-14		
è	approach to work	According to the interim results, there is an uneven distribution of functions in the team, well-coordinated work	5-9		
C	St. Ma. 8	According to the interim results, there is a formal attitude of the participants to the work performed, there is no collective interaction	0-4		
<u>Cn</u>	lecklist for project	WORK The topic of the project is fully disclosed during the presentation of the project	Max 100		
	edu. KI S. SKM	deep knowledge was demonstrated that goes beyond the scope of the program being studied. The research methods are described, the ways of achieving the goals are substantiated. Scientific terms are used, there is a free operation with them. Modern research methods are used.	15-20		
1	Depth of disclosure of the project topic	The topic of the project is disclosed, during the presentation of the project, residual knowledge was demonstrated within the framework of the program being studied. The research methods are described, the ways of achieving the goals are substantiated. Scientific terms are not used enough. The text is presented in a logical sequence.	10-14		
	1 St Sknonde	The theme of the project is partially disclosed. The description of the project is not complete. Scientific terms are not used. The text is presented randomly.	5-9		
7.	LA AF	The theme of the project is not disclosed. The description of the project is not	0-4		

о́́́ити́stik-qazaqstan MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ	цинская академия»
Departments: "Medical Biophysics and Information Technologies", "Social health insurance and public health"	№ 35-11 (Б)-2024 № 58 - 12 - 2024
Syllabus of the subject "Introduction to Scientific Research"	18 page out of 28
The second	1. A. A.

4	i die ale	complete. Scientific terms are not used. The text is presented randomly.		1411 -3			
ir K	1 St skine e	The results fully cover the research, they are objective, reliable. Tables, fig formulas are given. The applicability of the research results, the target consu of the results are indicated.	ures, mers	15-20			
2	Objectivity and reliability of the obtained results,	The results fully cover the research, they are objective, reliable. Tables, figures, formulas are given. The applicability of the research results, the target consumers of the results are not indicated.					
<u></u>	significance	The results partially cover the research, they are objective, reliable. Tables, fig formulas are given in insufficient quantity.	ures,	5-9			
54	Ng. Sear M.K	The results do not cover research, they are not objective, not reliable. Ta figures, formulas are not given or insufficiently given.	bles,	0-4			
	skning edi	The conclusions are formulated correctly, argued and fully cover the results or research.	f the	15-20			
1	Formulation of	The conclusions are formulated correctly, argued, but partially cover the result the research.	lts of	10-14			
97). 2	conclusions	The conclusions are formulated incompletely, not sufficiently substantiated partially cover the results of the research.	and	5-9			
e de la compañía de la	N. KI SK.	The conclusions are formulated incorrectly, not substantiated and partially cov do not cover the results of the research.	er or	0-4			
0	en 1.	The goal of the project has been achieved. All assigned tasks have been compl	eted.	15-20			
4	Achievement of the project goal and solution of the set tasks	The goal of the project as a whole has been achieved. Tasks have not been fully resolved.					
		The goal of the project was partially achieved. Not all tasks have been comple	ted.	5-9			
Sr		The goal of the project has not been achieved. The tasks set have been partially solved or not solved.					
4	KL SKINDING	The project covers and discloses all sections. The text is presented in a logical sequence, concisely, competently. The technical requirements for the design of the project are observed. The presentation is visual. During the presentation speaker demonstrates professional awareness and artistry.					
10. 0. 0.	The project and presentation are	The project covers and discloses all sections. The text is presented in a logical sequence. There are minor grammatical and stylistic mistakes. Technical requirements for the design of the project are not fully met. The presentation is not visual. During the presentation speaker demonstrates professional awareness and artistry.					
1.1.1.	designed in accordance with the requirements	gned in ordance with requirements All sections are covered in the project. The logical sequence of the presentation of the material is not always observed. There are grammar and stylistic mistakes. Technical requirements for the design of the project are not met. The presentation is not visual. During the presentation speaker does not demonstrate a deep knowledge of the topic is constrained					
	edu. K. Shi shine	Not all sections are covered in the project. The logical sequence of presentation the material is not respected. There are grammatical and stylistic errors. Tech requirements for the design of the project are not met. The presentation is not vi During the presentation speaker does not demonstrate a deep knowledge of topic, finds it difficult to answer questions, is constrained.	on of nical sual. f the	0-4			
Ch	ecklist for Midterr	n control	M	ax 100			
1	MCQs is carried of	put in electronic form. 90-	100	Excellent			
2	The test contains :	50 questions. 70	-89	Good			
3	A 100-point scale	is used for evaluation. 50	-69	Satisfactory			
4	Testing time is de	termined by the teacher (no more than 50 minutes) <	50 L	Insatisfactory			
Pul	olic health	averal strate of which all all all all	Fr	1 3. 11.			

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Checklist for practical classes

о́́́итústik-qazaqstan MEDISINA АКАДЕМІАЗҮ «Оңтүстік Қазақстан медицина академиясы» АҚ



SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия» Departments: "Medical Biophysics and Information Technologies", "Social health insurance and public health" № 35-11 (Б)-2024 № 58 - 12 - 2024 Syllabus of the subject "Introduction to Scientific Research" 19 page out of 28

The form control	Mark	Criteria for evaluation
J.KI. KI. SK	Excellent A (95-100%); A- (90-94%)	It is put in the event that the student did not make any mistakes, inaccuracies during the answer. He orients himself in theories, concepts and directions in the discipline under study and gives them a critical assessment, uses the scientific achievements of other disciplines.
Oral	Good B+ (85-89%); B (80-84%); B- (75-79%); C+ (70-74%)	It is put in the event that the student during the answer did not make gross errors in the answer, made unprincipled inaccuracies or fundamental errors corrected by the student himself, managed to systematize the program material with the help of the teacher.
answer	Satisfactory C (65-69%); C- (60-64%); D+ (50-54%)	It is put in the event that the student made inaccuracies and unprincipled mistakes during the answer, limited himself only to the educational literature indicated by the teacher, experienced great difficulties in systematizing the material.
JU.KI KI	Unsatisfactory FX (25-49%); F (0-24%).	It is put in the event that the student made fundamental mistakes during the answer, did not work through the main literature on the topic of the lesson; does not know how to use the scientific terminology of the discipline, answers with gross stylistic and logical errors.

I ovol

		evel		
Evaluation criteria	Great	Good	Satisfac- tion	Dissatis- faction
	90 - 100	70-89	50-69	<50
Oral interview	35-40	25-34	20-24	< 20
Knowledge of the basic terms and definitions of the topic under consideration	10-10	7-9	47	<6
Knowledge of the basic principles of medical services	10-10	7-10	7	<6
The ability to determine the relationship of the topic under consideration with the future profession, to give specific practical examples	10-10	7-10	4-6	<6
Links to additional literary sources in the response, additional summary, analysis of medical publications	5-10	4-5	2-4	0-2
Solving problems or completing tasks	27-30	23-26	20-22	< 20
The ability to analyze data	9-10	8-9	7-8	<7
Ability to work with regulatory documents	9-10	8-9	6-7	<6
The ability to draw conclusions	9-10	7-8	7-7 5	<7
Testing	28 - 30	22-27	10 – 21	< 10
Checklist for SIW	1 St a	<u>10. 60</u>	111-1	· Hi
The form		· 0.		2.0

The form control Mark		Criteria for evaluation
edu	Excellent A (95-100%); A- (90-94%)	The presentation was made independently, on time, with a volume of at least 20 slides. At least 5 literary sources were used. The slides are informative and concise. During the defense, the author demonstrates deep knowledge on the topic. Does not make mistakes when answering questions during the discussion.
Topic presentation	Good B+ (85-89%); B (80-84%); B- (75-79%); C+ (70-74%)	The presentation was made independently, on time, with a volume of at least 15 slides. At least 4 literary sources were used. The slides are informative and concise. During the defense, the author demonstrates good knowledge on the topic. Makes minor mistakes when answering questions that he corrects.
I SKI SKI	Satisfactory C (65-69%); C- (60-64%);	The presentation was made independently, on time, with a volume of at least 10 slides. At least 3 literary sources were used. The slides are not meaningful. When defending, the author makes fundamental mistakes when answering questions.

о́́́итústik-qazaqstan MEDISINA АКАДЕМІАЗҮ «Оңтүстік Қазақстан медицина академиясы» АҚ



SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия» Departments: "Medical Biophysics and Information Technologies", "Social health insurance and public health" № 35-11 (Б)-2024 № 58 - 12 - 2024 Syllabus of the subject "Introduction to Scientific Research" 20 page out of 28

	D+(50-54%)	1 Strate Charles 11 2	4. 3.	00	1 3	N. 3
J. K. St. SK	Unsatisfactory FX (25-49%); F (0-24%).	The presentation was not delivered on time 3 literary sources were used. The slides are author makes gross mistakes when answer material.	e, the volum e not meanin ing questior	e is less thangful. When ngful. When ns. Does no	an 8 slides. n defending t focus on c	Less than , the own
$\begin{array}{c c} \mbox{Preparation} \\ \mbox{Preparation} \\ \mbox{and defense} \\ \mbox{of the report} \end{array} \left( \begin{array}{c} \mbox{The} \\ \mbox{Excellent} \\ \mbox{A (95-100\%);} \\ \mbox{A (95-100\%);} \\ \mbox{A (90-94\%)} \\ \mbox{the to} \\ \mbox{asker} \\ \mbox{A- (90-94\%)} \\ \mbox{the to} \\ \mbox{asker} \\ \mbox{B+ (85-89\%);} \\ \mbox{B (80-84\%);} \\ \mbox{B (80-84\%);} \\ \mbox{Figure} \\ \mbox{figure} \\ \mbox{the to} \\ \mbo$	The report was made accurately and delivered on time, written independently on at least 15 typewritten pages, using at least 5 literary sources. Schemes, tables and figures corresponding to the topic of the abstract are given. When defending a report, the text does not read, but tells. Confidently and accurately answers all questions asked.					
	Good B+ (85-89%); B (80-84%); B- (75-79%); C+ (70-74%)	The report was made accurately and delivered on time, written independently on at least 10 typewritten pages, using at least 4 literary sources. Schemes, tables and figures corresponding to the topic of the abstract are given. When defending a report, the text does not read, but tells. When answering questions, he makes minor mistakes.				
BULKL S	Satisfactory C (65-69%); C- (60-64%); D+ (50-54%)	The report was made accurately and delive least 8 typewritten pages, using at least 3 h the text is read. Uncertainty answers quest	ered on time iterary source ions, makes	, written in ces. When J fundament	dependentl protecting t al mistakes	y on at he report, 3.
Ma.eou	Unsatisfactory FX (25-49%); F (0-24%).	The abstract was not drawn up in detail, it topic does not show figures, tables. Read d serious mistakes in answering the question	was not sub luring the de is asked.	omitted before efense of th	ore the deac e report. M	lline. The ade
SKMON	Great A (95-100%); A- (90-94%).	The test tasks contain at least 20 questions substantial. The test tasks are formulated c and adequate answers. There is a response correctly.	. Delivered learly, corre algorithm.	on time. Th ectly, and co The correct	ne basis of t oncretely. S answers ar	sis of the test is etely. Similar wers are marked
Preparation of test tasks	Good B+ (85-89%); B (80-84%); B- (75-79%); C+ (70-74%).	The test tasks contain at least 18 questions substantial. The test tasks are formulated c different types of answers. There is a respo marked correctly.	. Delivered learly, corre	on time. Thectly, and continue to the continue	ne basis of t oncretely. T rrect answe	he test is There are rs are
a.e.edu.	Satisfactory C (65-69%); C- (60-64%); D+ (50-54%).	The test tasks contain at least 15 questions not meaningful. There are test tasks that ar incompletely. There are different types of all correct answers are marked correctly.	. Delivered re formulate answers. Th	on time. Th d vaguely, ere is a resp	ne basis of t incorrectly, ponse algor	he test is , and ; thm. Not
L SKN MB.	Unsatisfactory FX (25-49%); F (0-24%).	The test tasks contain at least 10 questions question is unclear. There are different typ algorithm. More than 50% of the correct at	. The basis of answe nswers are i	of the text i rs. There is ncorrectly	s not meani no respons marked.	ingful, the se
Evaluation cri	teria	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	90-100	70-89	50-69	<50
Deadline for d than 4 days)	lelivery of SIW (o	n time, 1-2 days delay, 3 days delay, more	25-25	18-24	17-23	<13-16
The form of d tasks) accordin	elivery of the SIW ng to the requirem	(number of pages / slides, number of test ents of the syllabus.	25-25	18-24	17-23	<13-16
Visibility (typ differences, et	e and font size, us c.)	e of graphics tools, image shapes, color	20-25	17-24	10-16	<9-10
The use of lite	erary sources	KU. S. Or. Kr. S. Ma	20-25	17	6-7	<4-5
<b>Checklist for</b>	intermediate cer	tification	~ <u>6</u> ~	11. 101	at .	~~~ e
Border control/ Oral, situational	Great A (95-100%); A- (90-94%).	It is set if the student did not make any mis He is guided by theories, concepts and dire them a critical assessment, uses scientific a correct answers on the tests	stakes or ina ections in th achievemen	accuracies on the studied d ts of other of	luring the r iscipline an disciplines.	esponse. Id gives 90-100%

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<u></u>	<u>, 67</u>	W. V.	Social health insurance and publi	c health"		№ 58 - 12 - 2024
<u>Fr</u>	Co.	Syl	labus of the subject "Introduction	to Scientific	Research"	21 page out of 28
problem solving $B+($ B( B-( C+( C+( C+( C+( D+( D( D( 5)		Good B+ (85-89%) B ( 80-84%) B- (75-79%) C+ (70-74%).	It is put in the event that the made unprincipled inaccuracies or fundamenta systematize the program m on tests	It is put in the event that the student did not make gross mistakes during the answer made unprincipled inaccuracies or fundamental errors corrected by the student himself, managed to systematize the program material with the help of a teacher. 75-89% correct answer on tests It is posed if the student made inaccuracies and unprincipled mistakes during the answer, limited himself only to the educational literature indicated by the teacher, a experienced great difficulties in systematizing the material. 50-74% correct answer on tests		
		Satisfactory C ( 65-69%) C- ( 60-64%) D+ (55-59%) D (50-54%).	It is posed if the student ma answer, limited himself on experienced great difficulti on tests			
	KINQ. KINQ	Unsatisfactory FX (25-49%) F (0-24%).	It is put in the event that the did not work out the main l use the scientific terminolo errors. Less than 50% of the	e student m literature or ogy of the d he correct an	ade fundamen n the topic of t iscipline, answ nswers on the	ntal mistakes during the answer, the lesson; does not know how to wers with gross stylistic and logic tests.
Final	examina	ation	No. KI St. Ma	CV 10.	il d	<u></u>
Ma	ark by let	ter system	Numeric equivalent of points	S P	ercentage	Mark by traditional system
	A	St. no	4,0	95	-100	Excellent
			3,67	90	-94	
	<u>В</u> -	1 3	3,33	83	-89	The state second
$\frac{1}{2}$			3,0	- 75	-84	Good
<u>`</u>	C-	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		to the standard		
St	C	60.00	2,95	65	-69	and the structure
0	C.		1,67	1 67 60-64 Sat		Satisfactorily
4.	D+	- <u>3</u> . <u>6</u>	1,33	55	-59	14 N. 1. 14
Fr	D-	<u></u>	1,0	1,0 50-54		
Y	FX		0,5	25	-49	Unsatisfactory
$\overline{\gamma_{\mathcal{O}}}$	F	St all	C N. O St	0-2	24	Clisticitory
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ОŃŦÚSTIK-QAZAQSTAN MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ



SOUTH KAZAKHSTAN MEDICAL ACADEMY

«Оңтүстік Қазақстан медицина академиясы» АҚ ССУ АО «Южно-Казахстанская меди Departments: "Medical Biophysics and Information Technologies",	цинская академия» № 35-11 (Б)-2024
"Social health insurance and public health"	№ 58 - 12 - 2024
Syllabus of the subject "Introduction to Scientific Research"	22 page out of 28
4 Мелициналык-биологиялык деректерлі статистикалык таплаула excel және spss stati.	stics бағларламаларын

колдану. Чудиновских В.Р., Каипова А.Ш., Алтаева А.У., Абдикадыр Ж.Н. https://aknurpress.kz/reader/web/1341
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8. Койчуосков Б.К., Букесва А.С., Такуадина А.И., Жунусова Г.Г., Аодыкешова Д.Г. Мысалдар мен
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Biostatistics
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Supplementary

AKADEMIASY ACADEMY	Kullar edu u.Kr
Оңтүстік Қазақстан медицина академиясы» АҚ AO «Южно-Казахстанская меди Departments: "Medical Biophysics and Information Technologies"	цинская академия»
"Social health insurance and public health"	Nº 58 - 12 - 2024
Syllabus of the subject "Introduction to Scientific Research"	23 page out of 28
<ol> <li>Rosner Bernard Fundamentals of Biostatistics: Texbook/ B.Rosner 8 nd ed [s.l.]:GEN</li> <li>Мысалдар мен тапсырмалардағы биостатистика: оку-әдістемелік құрал Алматы: Э</li> <li>Койчубеков Б.К. Букеева А.С., Такуадина А.И., Жунусова Г.Т., Абдыкешова Д.Т. М тапсырмалардағы биостатистика: оку әдістемелік құрал Алматы: TOO Эверо, 2024</li> <li>Койчубеков Б.К. Биостатистика: Монография Алматы: TOO Эверо, 2024</li> <li>Койчубеков Б.К. Биостатистика: Монография Алматы: TOO Эверо, 2024</li> <li>Бухарбаев М. А. Медицинская статистика: учебное пособие / М. А. Бухарбаев, В. Н. Алматы: Эпиграф, 2022 268 с.</li> <li>Public health</li> <li>Маіп</li> <li>Общественное здравоохранение: учебник / А.А. Аканов [и др.], - Одобрено и рек. сфере образования и науки. Мин-ва образования и науки РК М.: "Литтерра", 2020</li> <li>Rosner. Bernard Fundamentals of Biostatistics: texbook / B. Rosner 8 nd ed. [S. l.]: GE</li> <li>Бөлешов М.Ә. Қоғамдық денсаулық және денсаулықты сақтау: оқулық / М.Ә. Бөлеп</li> <li>Қэмпбелл А. Медициналық этика: оқу құралы: ағылшын тілінен ауд./ А. Кэмпбелл, ред. Ю. М. Лопухин М.: ГЭОТАР - Медиа, 2019 368 бет.</li> <li>Биоэтика: учебное пособие / В. В. Сергеев [и др.]; Рек. учебно-методическим объеди образованию вузов М.: ГЭОТАР - Медиа, 2013 240 с.</li> <li>Additional</li> <li>Рыманов Д.М. Денсаулық сақтауды баскару этикасы: оку-әдістемелік кешен здравоохранении: учебно-методический комплекс / - Алматы: Эверо, 2018 164 бет.</li> <li>Койков В.В. Надлежащая практика научных исследований: Избранные вопросы мети исследований и исследований в медицинском образовании [Текст]: исследовани</li> </ol>	GAGE learning, 2016 веро, 2013 108 бет. Іысалдар мен - 108 б. Казагачев 2-е изд Комитетом по контролю в 496 с ENGAGE learning, 2016. 108 Алматы: Эверо, 2015 Г. Джиллет, Г. Джонс; инением по мед. и фарм. = Этика управления в одологии биомедицинских е / В. В. Койков, Г. А.
М-во образования и науки РК Алматы: Эверо, 2013 136 с.         12.       Subject policy         Requirements for studying this course:         1. Do not miss classes without reason;         2. Do not be late for classes;	2. CULLY SKINO
3. Come to classes in uniform; 4. To be active during the practical classes;	KU13.8.edu.u.k
<ul> <li>3. Come to classes in uniform;</li> <li>4. To be active during the practical classes;</li> <li>5. To prepare for lessons;</li> </ul>	Kma.e.edu.kl
<ul> <li>3. Come to classes in uniform;</li> <li>4. To be active during the practical classes;</li> <li>5. To prepare for lessons;</li> <li>6. Take the students independent work and prepare it timely;</li> </ul>	KM3.edu.edu.kl
<ul> <li>3. Come to classes in uniform;</li> <li>4. To be active during the practical classes;</li> <li>5. To prepare for lessons;</li> <li>6. Take the students independent work and prepare it timely;</li> <li>7. Not to do other things during lessons;</li> <li>8. To be tolerant, polite and friendly to students and teachers;</li> </ul>	Kma.edu.edu.kk
<ol> <li>Come to classes in uniform;</li> <li>To be active during the practical classes;</li> <li>To prepare for lessons;</li> <li>Take the students independent work and prepare it timely;</li> <li>Not to do other things during lessons;</li> <li>To be tolerant, polite and friendly to students and teachers;</li> <li>Be careful to the department equipment and furniture</li> </ol>	KINA. E. Edu. W. K. K. K. K. K. Edu. K. K. K. Edu. K. K. K. Edu. K. K. K. K. K. Edu. K.
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ОЙТÚSTIK-QAZAQSTAN MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ	SOUTH KAZAKHSTAN MEDICAL ACADEMY AO «Южно-Казахстанска:	я медицинская академия»
Departments: "Medical Biophysics a	and Information Technologies",	№ 35-11 (Б)-2024
"Social health insurance	e and public health"	№ 58 - 12 - 2024
Syllabus of the subject "Int	roduction to Scientific Research"	24 page out of 28
Mr. S. S. W. S. Mar al	No. It st. do	· 6. · 4. · 1. · (1. · 6.

The Student's Code of Honor: 1. The student strives to become a worthy citizen of the Republic of Kazakhstan, a professional in his chosen specialty, to develop the best qualities of a creative personality. 2. The student treats his elders with respect, does not allow rudeness towards others and shows empathy for socially vulnerable people and, as far as possible, takes care of them. 3. The student is a model of decency, culture and morality, is intolerant of immorality and does not allow discrimination based on gender, nationality or religion. 4. The student leads a healthy lifestyle and completely abandons bad habits. 5. The student respects the traditions of the university, protects its property, monitors cleanliness and order in the student dormitory. 6. The student recognizes the necessary and useful activities aimed at the development of creative activity (scientific, educational, sports, artistic, etc.), at improving the corporate culture and image of the university. 7. Outside the walls, the student always remembers that he is a representative of a higher school and makes every effort not to drop his honor and dignity. 8. The student considers it his duty to combat all types of academic dishonesty, including: cheating and asking others for help in passing knowledge control procedures; presenting any volume of ready-made educational materials (abstracts, term papers, tests, theses and other works), including online resources, as the results of his own work; circumvention Anti-plagiarism systems; the use of family or official ties to obtain a higher grade; absenteeism, tardiness and skipping classes without a valid reason. Registrar's Office AP 044/101-2022 Ed. No.4 14 p. of 67 Academic policy of SC "SKMA" 9. The student considers all the listed types of academic dishonesty as incompatible with obtaining a high-quality and competitive education worthy of the future economic, political and managerial elite of Kazakhstan Vision

Effective system of medical and pharmaceutical education, based on the competence approach and the needs of practical public health and pharmaceutical industries, focused on the training of specialists that meet international quality and safety standards.

Basic ethical principles, on which SKMA relies for the realization of its mission:

To be a recognized leader in the field of training competitive personnel!

The principle of high professionalism the teaching staff of SKMA – this is permanent improvement of their knowledge and skills, ensuring the provision of quality educational services for students at all levels of training. The principle of quality in SKMA – this is the realization of conception of modernization of Kazakhstan education, the main direction of which is to ensure the modern quality of education based on the preservation of its fundamental and compliance with the actual and prospective needs of the individual, society and state, which is ensured by the use in the educational process, scientific-research activities and consultative and diagnostic work of innovative technologies and new achievements of science and practice.

The principle of orientation training – this is the implementation of a student-centered learning process on flexible path of educational programs, taking into account the rapidly changing economic conditions and current trends in the labor market, the creation of maximum effective conditions for their professional growth, development of motivation and monitoring of training outcomes, continuous renovation of educational

programs, expanding the volume of knowledge and competence, necessary for effective professional activity.

Academic policy http://surl.li/eroik

### Grading Policy 3.

2.

Student's final mark (FM) is given at the end of the course, and calculate as a sum of the admission rating mark (ARM) and the *final control mark* (FCM) and is given according to the point-rating letter system.

## FM=ARM+FCM

Admission rating mark (ARM) is equal to 60 points or 60% and includes: the current control mark (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 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 questions out of 50, it will be 90%.

 $90 \ge 0.4 = 36$  points.

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Departments: "M	edical Biophysics a	and Information Technologies", № 2	35-11 (Б)-2024 58 12 2024
Syllabus	s of the subject "Int	roduction to Scientific Research"	page out of 28
The final mark is calcula 30% or more, and in the fin A student who has receiv allowed to the exam. Penalty points are subtrac	ted if the student final control (FC) al grade (100 poin ed an unsatisfacto ted from the aver	has positive marks both in the admission rating (AR = 20 points or 20% or more. mts) = MCM average x 0.2+CCM average x 0.4+FC x 0.4 ory mark for one of the types of controls (MK1, MK2, age score of the current control	) = 30 points o CC <sub>average</sub> ) is no
14. Approval and revision		A STRACT SO THAT THE STRAT	
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АКАДЕМІАЅҮ АСАДЕМУ «Оңтүстік Қазақстан медицина академиясы» АҚ АО «Южно-Казахстанская медици	инская академия»
Departments: "Medical Biophysics and Information Technologies",	№ 35-11 (Б)-2024
"Social health insurance and public health"	№ 58 - 12 - 2024
Syllabus of the subject "Introduction to Scientific Research"	26 page out of 28

# The protocol of coordination of the working curriculum of the discipline (Syllabus) with other disciplines for the 2024-2025 academic year.

Coordination Subjects	Suggestions for changes in the proportions of the material, the order of presentation, etc.	Protocol numbers and meeting dates of the coordinating departments
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Postrequisites:	A de da competition de as do	Hr S Mar
Hygiene and epidemiology	1. The course "Introduction to scientific research", the section "Biostatistics" is devoted to the skills of applying methods of statistical processing of biomedical data and population health indicators to describe and interpret data and work with applied programs, skills of scientific analysis and their practical application. The content and sequence of presentation of the course material "Introduction to scientific research", the section "Biostatistics" is considered appropriate.	Department of Hygiene and Epidemiology Protocol № <u>10</u> dated <u>05/20/24</u> y.
Mandatory Social Health Insurance and Medical Law	2. The course "Introduction to scientific research", the section "Public Health" is devoted to legislative documents regulating the activities of healthcare organizations. Rights and obligations in the field of healthcare. Work in electronic databases of the healthcare system of the Republic of Kazakhstan. The content and sequence of presentation of the course material "Introduction to scientific research", the section "Public health" is considered appropriate.	Department of Social Health Insurance and Public Health Protocol № <u>15</u> dated <u>10/06/24</u> y.

**Postrequisites:** 

Head of the Department of Hygiene and Epidemiology Candidate of Medical Sciences, Acting Professor

Utepov P.D.

Head of the Department of Social Health Insurance and Public Health, Associate Professor

Sarsenbayeva G.Zh.

OŃTÚSTIK-QAZAQSTAN MEDISINA AKADEMIASY ,,	KL S SKIIL NO. C. Edu, U.K
«Оңтүстік Қазақстан медицина академиясы» АҚ ОЗА «Южно-Казахстан» Departments: "Medical Biophysics and Information Technologies", "Social health insurance and public health"	№ 35-11 (Б)-2024           № 58 - 12 - 2024
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