

SYLLABUS
Fall semester 2025-2026 academic year
Educational program for the specialty Public Health “7M10102”

ID and title off the course	Student independentwork (SIW)	Credits number			Total number of credits	Student independent work under teacher supervision (SIWT)
		Lecture (L)	Classes(C)	Laboratory classes (L)		
ME	4	-	60	-	5	6
ACADEMIC INFORMATION ABOUT THE DISCIPLINE						
Training format	Cycle, component	Type of lectures	Type of classes	Form and platform of final control		
offline	B,	informative-	Seminars	Written in Univer		
Lecturer	Farida Iskakova					
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ACADEMIC PRESENTATION OF DISCIPLINE						
Purpose of discipline	Expected Learning Outcomes (ELOs)*			Indicators of ELO's\ achievement(IA)		
to form knowledge, skills, and competencies focusing on the role and use of epidemiologic tools in Healthcare administration.	1. Acquaint students with concepts, methods, and techniques of Managerial Epidemiology.			1.1 Identify concepts of managerial epidemiology.		
				1.2 Perform methods and techniques of managerial epidemiology.		
	2. To study and provide a healthcare organization's management, research planning, and quality assurance.			2.1 Provide management of research planning.		
				2.2 Provide a scenario of quality assurance of a healthcare organization.		
	3. To study and provide financing and economic analysis of a healthcare organization.			3.1 Create a scenario of financing analysis of a healthcare organization.		
				3.2 Create a scenario of economic analysis of a healthcare organization.		
	4. To analyze scientific research results.			4.1. Analyze scientific research results (descriptive, analytical, and clinical trials).		
				4.2. Determines the statistical significance of relationships and differences for all types of variables by applying the appropriate statistical criterion.		
	5. to conduct main directions, laws, methods, algorithms, and tools of medical statistics in research analysis.			5.1 Present results in the form of graphs and tables.		
				5.2. Write a report on the effectiveness of one of the existing screening programs in Kazakhstan.		
Prerequisites	Biostatistics [96313]					
Post-requisites	Fundamentals of public health research [101986]					

Learning sources	<p>The Main Literature:</p> <ol style="list-style-type: none"> 1. Managerial Epidemiology: Cases and Concepts, 4th Edition, by Steven T. Fleming (Editor). - 632 p. //chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://lib.zu.edu.pk/ebookdata/Epidemiology/Managerial%20Epidemiology%20_%20cases%20and%20concepts-by%20Steven%20T.%20Fleming.pdf <p>The Additional Literature:</p> <ol style="list-style-type: none"> 2. Применение методов статистического анализа для изучения общественного здоровья и здравоохранения. Под редакцией В.З.Кучеренко. Учебное пособие для ВУЗОВ. Изд. группа Гэотар-Медиа.-2007.-245 с. <p>Research infrastructure</p> <ol style="list-style-type: none"> 1. Computer lab 6A 2. Professional research databases 3. www.gapminder.com 4. www.cdc.gov 5. www.who.org <p>Internet sources</p> <ol style="list-style-type: none"> 1. http://elibrary.kaznu.kz/ru 2. https://www.stat.gov.kz/ <p>Software</p> <p>Excel SPSS</p>
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Academic policy of discipline	<p>Academic Policy and Academic Integrity Policy are defined by Al-Farabi KazNU policy.. The documents are available on the main page of IS Univer.</p> <p>Integration of science and education. Research work by students, including master's and doctoral students, deepens the educational process. It is organized directly at the departments, laboratories, scientific and project divisions of the university, in student scientific and technical associations. Independent work of students at all levels of education is aimed at the development of research skills and competencies based on obtaining new knowledge using modern research and information technologies. The teacher of the research university integrates the results of scientific activity into the topics of lectures and seminars (practical) classes, laboratory classes, and in the assignments of SROP, SROP, which are reflected in the syllabus and are responsible for the relevance of the topics of training sessions and assignments.</p> <p>Attendance. The deadline for each assignment is specified in the calendar (schedule) of the implementation of the discipline's content. Failure to meet deadlines will result in loss of points. All learners, especially those with disabilities, can receive counseling assistance by telephone / e-mail +77011013086/farida.iskakova@kaznu.edu.kz or iskakovaf@gmail.com or by joining Zoom Meeting https://us04web.zoom.us/j/77801302391?pwd=c0I5647Iwe4woqZ5EJPBCNJJ42masY.1 Meeting ID: 778 0130 2391 Passcode: 7ZaZwz</p> <p>Integration of MEP (massive open online course). In the case of integration of MEP into the discipline, all students need to register for MEP. The deadlines for MEP modules must be strictly adhered to by the schedule of the discipline.</p> <p>ATTENTION: The deadline for each assignment is specified in the calendar (schedule) of the implementation of the content of the discipline, as well as in the MEP. Failure to comply with deadlines leads to a loss of points.</p>
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Point-rating letter system of evaluation of learning achievements			Assessment methods
Scores	Digital equivalent of points	Scores, % contentкоде ржание	<p>Criterion-referenced assessment is the process of correlating actual learning outcomes with expected learning outcomes based on clearly defined criteria. It is based on formative and summative assessment. Formative assessment is a type of assessment that is carried out in the course of daily learning activities. It is a current indicator of learning achievement. Provides an operational relationship between the student and the teacher. It enables us to assess the student's capabilities, identify areas of difficulty, assist in achieving optimal results, and promptly correct the teacher's educational process. Evaluate the fulfillment of tasks and activities in the classroom during lectures, seminars, and practical classes (discussions, quizzes, debates, round tables, laboratory work, etc.). Acquired knowledge and competencies are assessed. Summative assessment is a type of assessment conducted at the end of a section of study by the program of the discipline. It is carried out 3-4 times per semester when performing SLOs. It is an assessment of mastering the expected learning outcomes in correlation with descriptors. Enables you to assess and document the level of mastery of the discipline over a specific period.</p>
Scores	Digital equivalent of points	scores, % contentкоде ржание	
A	4,0	95–100	
A-	3,67	90–94	
B+	3,33	85–89	
B	3,0	80–84	
B-	2,67	75–79	
C+	2,33	70–74	<p>Satisfied</p> <p>Formative and summative assessment Formative and summative</p>

			assessment		
C	2,0	65–69	Unsatisfied	Formative and summative assessment	-
C-	1,67	60–64		Activity in lectures	5
D+	1,33	55–59		Work at practical classes	20
D	1,0	50–54		Independent work	25
FX	0,5	25–49		Control work	10
				Project and creative activity	40
			TOTAL	100	

Schedule of the realization of the content of the discipline. Methods of teaching and learning			
Week	Topic	N of hours	Max. scores
MODULE 1 Fundamentals of Medical Statistics			
1	Lecture. Introduction to managerial epidemiology	1	
	Cl Introduction to managerial epidemiology.	3	6
2	Lecture. Introduction to population health.	1	
	C. Population Health	3	6
3	Lecture. Infectious disease epidemiology.	1	
	Cl.. Infectious disease epidemiology.	3	6
	SIWT 1. Consultations on the implementation of SIW1	3,33	-
4	Lecture. Epidemiology of non-communicable diseases.	1	
	Cl. Epidemiology of non-communicable diseases.	3	6
	SIW1. " Writing Assignment on 1-4 topics".	10	25
5	Lecture. Morbidity as an indicator of population health.	1	
	Cl.. Measuring and interpreting morbidity.	3	6
	SIWT 2. Colloquium (Test).	3,33	-
6	Lecture. Mortality as an indicator of population health and risk adjustment.	1	
	Cl. 6. Mortality and risk adjustment.	3	6
	SIWT 3. Consultation on the implementation of the SIW 2.	3,33	10
7	Lecture. Healthcare planning and needs assessment.	1	
	Cl.. 7. Healthcare planning and needs assessment.	3	7
	SIW 2. " Writing Assignment on 5-7 topics"	10	25
8	Lecture. Quality of care measurement	1	
	Cl.. 8 Quality of care measurement	3	7
MT 1			100
8	Lecture. Quality of care measurement	1	
	Cl.. 8 Quality of care measurement	3	7
	SIWT 3. Consultation on the implementation of the SIW 3.	3,33	-
9	Lecture: 5 steps of EBM.	1	
	Cl. 9 Evidence-based management of Medicine.	3	7
10	Lecture. Epidemiologic studies: hierarchy, observational studies.	1	
	Cl.. 10. Epidemiologic studies. Case reports, case series, case-control studies, and cohort	3	7
	SIWT 4. Consultation on the implementation of the SIW 3.	3,33	-
11	Lecture. Clinical trials.	1	
	Cl.. 11. Randomized Clinical Trials, Confounding, Effect Modification, and Bias.	3	7
	SIW 3. Essay on 8,9,10,11 seminar's item.		
12	Lecture. Epidemiology and Financial Management.	1	
	Chapter 12. Epidemiology and Financial Management.	3	7
	SIWT 5. Consultation on the implementation of the SIW 4.	3,33	-
13	Lecture. Cost-effectiveness Analysis.	1	
	Cl.13. Cost-effectiveness analysis.	3	7
14	Lecture 14. Clinical Epidemiology and Decision Making.	1	

	Cl. 14. Clinical Epidemiology and Decision Making.	3	7
	SIWT 6		
15	Lecture. Epidemiology and Leadership	1	
	Cl. 15. Epidemiology and Leadership	3	8
	SIW 4 "Writing assignment of 11-15 topics".	10	25
MT2			100
	Final exam		100
	total		100

Dean _____ **S.B. Kalmahanov**

Head of department _____ **A.E.Ualiyeva**

Lecturer _____ **Iskakova F.A.**