

**AL-FARABI KAZAKH NATIONAL UNIVERSITY  
FACULTY OF MEDICINE AND HEALTHCARE  
CHAIR OF EPIDEMIOLOGY, BIostatISTICS AND EVIDENCE-BASED  
MEDICINE**

**APPROVED**

**Dean of faculty**

\_\_\_\_\_ (signature)

**Kalmatayeva Zh.A.**

**" \_\_\_\_\_ " \_\_\_\_\_ 2022г.**

**TEACHING MATERIALS**

**PiO3219**

**PATIENT AND SOCIETY**

**Field of education  
6B101 Public Health**

**EDUCATIONAL PROGRAM  
6B10103 General Medicine**

Grade – 3  
Semester – 6  
Credits 8

**Almaty, 2022**

Teaching programs of course is compiled on a base of Curriculum

**6B10103 GENERAL MEDICINE**

LMC of the discipline approved at a meeting of  
the Academic Council of the Faculty of Medicine  
and Healthcare

Protocol no. \_\_\_\_\_ from " " \_\_\_\_\_2022.

Recommended at a meeting of Faculty methodical bureau

«\_\_\_\_» \_\_\_\_\_ 2022., protocol N \_\_\_\_\_

Chair of Faculty methodical bureau \_\_\_\_\_ Ualyeva A.E.  
(signature)

**Al-Farabi Kazakh National University**  
**Faculty of Medicine and Healthcare**  
**Chair of Epidemiology, Biostatistics and Evidence-Based Medicine**

**Approved**  
**Dean of Faculty**

Kalmatayeva Zh.A.  
 " \_\_\_\_\_ " \_\_\_\_\_ **2022**

**SYLLABUS**  
**6 semester 2021-2022 ac.ys**

**Academic information about course**

Code of discipline	Title	Type	Hours			N. of credits
			seminars	SIWT	SIW	ECTS
PiO3221	Patient and society	BD	120	40	80	8
Course's coordinator	Acting Associate Professor Iskakova Farida Arkenovna		9.00- 13.00			On schedule
e-mail	<a href="mailto:Iskakova.farida@kaznu.kz">Iskakova.farida@kaznu.kz</a>					
Phone	+77011013086					

The goal of this course is a formation of knowledge and skills of evidence-based medicine for critical assessment of medical information and rational use in further practical activities; the ability to assess various external environmental factors in the context of the formation of pathology in a particular patient.

Teaching outcomes:

1. Identify health problems at the population level;
2. Be able to integrate scientific evidence with physician's clinical experience and patient values;
3. To be able to use conscientiously, accurately and meaningfully reliable results of clinical trials for a choice of particular patient's treatment;
3. Possess knowledge, skills and abilities of basics of evidence-based medicine, which allow to critically evaluate medical information for rational use in further practice;
4. Apply exposure-oriented knowledge of disease's epidemiology to assess various external environmental factors in context of a formation of pathology in a particular patient
5. Apply different approaches to understand social, economic and political forces that affect both the burden of disease and the ability of the health system to improve it.
6. Apply knowledge of outcome-based disease epidemiology to identify and improve the effectiveness of therapeutic and preventive health care programs.
7. Recognize and analyze ethical issues in practice that based on the ethical principles as a base of clinical care, research and professionalism in general;
8. Critically assess evidence and use it appropriately in clinical decisions and public health management in the context of national and global health policy.

	<p>9. Demonstrate adherence to the highest standards of professional responsibility and integrity; comply with ethical principles in all professional interactions;</p> <p>10. Demonstrate needs for continuous professional training and improvement of their knowledge and skills;</p> <p>11. Demonstrate skills of conducting scientific research, desires for new knowledge and transfer it to others;</p> <p>12. Apply knowledge and skills of population's health surveillance, including epidemiological surveillance over infectious diseases;</p> <p>13. Apply modern statistical methods of analysis in medical and biomedical research and independently use computer statistical programs.</p>
Пререквизиты	General pathology
Постреквизиты	Private Immunology, private Genetics
Информационные ресурсы	<p><b>Module Epidemiology</b></p> <p>Basic references:</p> <p>8. Gordis, Leon, Epidemiology, 5th Edition, W.B. Saunders Company, 2013.-</p> <p>9. Principles of Epidemiology in Public Health Practice, 3d Edition, CDC, US Department of Public Health, 2012</p> <p>10. High-Yield Biostatistics, Epidemiology, &amp; Public Health, 4th Edition Kaplan USMLE, Lecture Notes, Behavioral Sciences and Social Science, 2017.- 229p.</p> <p>11. Wolfgang, A. Handbook of Epidemiology. 5 vol.//Ahrens Wolfgang, Peugeot Iris. - 2 ed.- Springer Reference, 2014.</p> <p>Additional references:</p> <p>12. Water, Sanitation, &amp; Environmentally-related Hygiene//<a href="https://www.cdc.gov/healthywater/hygiene/audience-healthprofessionals.html">https://www.cdc.gov/healthywater/hygiene/audience-healthprofessionals.html</a></p> <p>13. Modern Epidemiology. 3rd Edition Kenneth.J. Rothman, Sander Greenland, Timothy L. Lash.-2008.-158 p.</p> <p><b>Module Biostatistics</b></p> <p>Basic references:</p> <p>1. Fundamentals of Biostatistics. 8th Edition. 7th edition. Bernard Rosner, Cengage Learning.-2016.-856 p.</p> <p>Additional references:</p> <p>1. Primer of Biostatistics. Seventh Edition. Stanton A. Glantz, Ph.-2009.-297p.</p> <p>2. Epi Info for windows// <a href="http://www.cdc.gov/epiinfo/pc.html">www.cdc.gov/epiinfo/pc.html</a></p> <p><b>Module Evidence-Based Medicine</b></p> <p>Basic references:</p> <p>1. Evidence-Based Medicine. How to Practice and Teach EBM (3rd Edition). S.E. Straus, W.S. Richardson, Paul Glasziou, R. Brian Haynes.</p> <p>2. Literature Reviews in Social Work. Robin Kiteley and Christine Stogdon.- 2014.- 20 p.</p> <p>Additional references:</p> <p>1. Evidence-Based Answers to Clinical Questions for Busy Clinicians Work book.- 2009.-26p.</p> <p>2. APPRAISAL OF GUIDELINES FOR RESEARCH &amp; EVALUATION II. The AGREE Next Steps Consortium.-May 2009.-52 p.</p>
Websites	<p>1. <a href="http://www.who.org">www.who.org</a></p> <p>2. <a href="http://www.cdc.gov">www.cdc.gov</a></p> <p>3. <a href="http://www.medscape.com">www.medscape.com</a></p> <p>4. <a href="http://www.oxfordmedicine.com">www.oxfordmedicine.com</a></p> <p>5. <a href="http://www.uptodate.com">www.uptodate.com</a></p>

	<p>6. <a href="http://www.medline">www.medline</a></p> <p>7. <a href="http://www.cockrane.library">www.cockrane.library</a></p> <p>8. <a href="https://pubmed.ncbi.nlm.nih.gov/">https://pubmed.ncbi.nlm.nih.gov/</a></p> <p>9. <a href="http://www.gbd.org/">http://www.gbd.org/</a></p>
Academic policy of the course in context of university values	<p>1) <b>Rules of academic conduct:</b></p> <p>Personal appearance:</p> <ul style="list-style-type: none"> <li>➤ dress code</li> <li>➤ clean ironed robe</li> <li>➤ medical cap</li> <li>➤ changeable shoes</li> <li>➤ badge with full name</li> </ul> <p><b>1. Properly executed personal medical record.</b></p> <p><b>2. Mandatory compliance with personal safety rules and occupational safety.</b></p> <p><b>3. Wearing personal protective equipment during the epidemic period.</b></p> <p>4. Systematic preparation to educational process.</p> <p>5. Accurate and timely maintenance of reporting documents.</p> <p>6. Active participation in medical, diagnostic and social events of the departments.</p> <p>Discipline:</p> <ul style="list-style-type: none"> <li>➤ Students are not allowed to be late for class or morning conference. If the student is late - the decision on admission to the lesson is made by the teacher leading the lesson. After the third delay, the student writes an explanatory letter to a head of the department indicating reasons for the delay and goes to the dean's office to obtain admission to class.</li> <li>➤ Leaving class ahead of schedule, being outside the workplace during school hours is considered as absent.</li> <li>➤ Additional work of students during school hours (during practical classes and on duty) is not allowed.</li> <li>➤ A report about an expulsion is issued for students who have more than 3 passes without notifying the curator and a good reason.</li> <li>➤ Missed classes are not completed.</li> <li>➤ Students are fully subject to the Internal Order Rules of KazNU and clinical bases.</li> </ul> <p><b>Academic values:</b></p> <p>Academic honesty and integrity: independence in completing all assignments. Plagiarism, fake, crib notes, cheating at midterm and exam, disrespectful attitude towards a teacher are not allowed.</p>
Grading policy and certification	<p><b>Criteria-based assessment:</b></p> <p>Evaluation of work by type of activity using checklists.</p> <p><b>Summative assessment:</b> final control of the discipline from 2 stages:</p> <p>I. stage – MCQ testing for understanding and applying knowledge.</p> <p>II. stage – short case.</p> <p>The method of assessing SIW is the results of student’s scientific research.</p>

### Course content implementation calendar:

		Notice	Max.scores
<b>Module 1. Epidemiology</b>			
Class 1	Topic: Introduction and bases of Epidemiology.	6 hours	10
Class 2	Topic: Epidemiological methods and study design.	6 hours	10
Class 3	Topic: Introduction to Exposure oriented Epidemiology.	6 hours	10
Class 4	Topic: Introduction to Outcome-oriented Epidemiology.	6 hours	10

Class 5	Topic: Base of epidemiological surveillance. Prophylaxis of diseases.	6 hours	10
			100
<b>Module 2. Biostatistics</b>			
Class 1	Topic: Introduction to Biostatistics. Data processing	6 hours	10
Class 2	Topic: Descriptive statistics. statistics.	6 hours	10
Class 3	Topic: Analytical statistics.	6 hours	10
Class 4	Topic: Inferential statistics.	6 hours	10
Class 5	Topic: Statistics in Evidence-Based Medicine.	6 hours	10
			100
<b>Module 3. Evidence-based medicine</b>			
Class 1	Topic: Principles and methods of Evidence-Based Medicine.	6 hours	10
Class 2	Topic: Search and critical appraising of medical scientific articles.	6 hours	10
Class 3	Topic: Clinical Epidemiology.	6 hours	10
Class 4	Topic: Systematic review and meta-analysis. AGREE and assessment of clinical recommendations.	6 hours	10
Class 5	Topic: Bioethics and clinical trials.	6 hours	10
Combine Midterm (BC 2)		Type of control: test and case	100
- I stage - MCQ testing for understanding and applying knowledge		25%	
- II stage –short case		75%	

Teacher: \_\_\_\_\_ Iskakova F.A.

Head of Chair \_\_\_\_\_ Mamyrbekova S.A.

Chair of methodological bureau of the faculty \_\_\_\_\_ Ualyieva A.E.

**SCHEDULE AND CONTENT OF CLASSES**

N	Title	Content	Resource materials
2	3	4	4
<b>MODULE 1. EPIDEMIOLOGY</b>			
1	Topic: Introduction and bases of Epidemiology.	The basic terms and field of application. Concepts of causality and probability. Epidemiological triad. Factors that related to infectious agent, environment and susceptible person. The concept of the epidemic process and mode of transmission. Epidemiological approach. Measure of populations' incidence, prevalence and mortality. Glossary. Mini presentation. CBL- Case study.	<ol style="list-style-type: none"> <li>1. Gordis, Leon, Epidemiology, 5th Edition, W.B. Saunders Company, 2013, p. 20-54, 55-61, 61-78</li> <li>2. Principles of Epidemiology in Public Health Practice, 3d Edition, CDC, US Department of Public Health, 2012. Lesson 1-4.</li> <li>3. High-Yield Biostatistics, Epidemiology, &amp; Public Health, 4<sup>th</sup> Edition, p.86-96</li> <li>4. Kaplan USMLE, Lecture Notes, Behavioral Sciences and Social Science, 2017, p.3-10</li> <li>5. An Introduction to Epidemiology. Wolfgang Ahrens, Klaus Krickeberg, Iris Pigeot, p.3-20</li> <li>6. CDC-materials <a href="https://www.cdc.gov/csels/dsepd/ss1978/lesson5/section2.htm">https://www.cdc.gov/csels/dsepd/ss1978/lesson5/section2.htm</a> 1</li> </ol>
2	Epidemiological studies and design.	Epidemiological studies. Observational and interventional studies. Descriptive: case reports, case series, ecological, cross-sectional studies. Analytical: case-control, cohort studies. Experimental studies. Clinical trials, RCT and non-RCT. Measure of associations, bias и confounders. Advantages and limits of epidemiological studies. Diagnostic and screening tests. Sensitivity and specificity. Likelihood. Positive prognostic value. Negative prognostic value. Usage of epidemiological studies in clinical medicine. Glossary. Mini presentation. CBL - Case study.	<ol style="list-style-type: none"> <li>1. Kaplan USMLE, Lecture Notes, Behavioral Sciences and Social Science, 2017, p.11-14, 17-24</li> <li>2. Gordis, Leon, Epidemiology, 5th Edition, W.B. Saunders Company, 2013, p.197-232, p.158-194, p.235-247, p.250-280, p.282-296, 346-367</li> <li>3. An Introduction to Epidemiology. Wolfgang Ahrens, Klaus Krickeberg, Iris Pigeot, p. 29-35</li> <li>4. High-Yield Biostatistics, Epidemiology, &amp; Public Health, 4th Edition, p.57-71, 82-92</li> <li>5. Wolfgang, A. Handbook of Epidemiology. 5 vol.//Ahrens Wolfgang, Peugeot Iris. - 2 ed.- Springer Reference, 2014, p.187-388</li> </ol>

3	Topic: Introduction to Exposure oriented Epidemiology	Environmental Epidemiology. Professional Epidemiology. Nutritional Epidemiology. Reproductive Epidemiology. Social Epidemiology. Features of development and measurement of risks factors. Glossary. Mini - presentation. CBL - Case study.	1. Gordis, Leon, Epidemiology, 5th Edition, W.B. Saunders Company, 2013, p.299-323 2. Wolfgang, A. Handbook of Epidemiology. 5 vol.//Ahrens Wolfgang, Peugeot Iris. - 2 ed.- Springer Reference, 2014, v.4
4	Topic: Introduction to Outcome oriented Epidemiology	Epidemiology of infectious (communicable) diseases. Modes of transmission. Epidemiological classification of infectious diseases. Case standard definition: expected, probable and confirmed cases. Outbreak investigation. Epidemiology of chronic non-communicable diseases: cardiovascular, oncology, respiratory diseases, and diabetes. Features of disease's history and measurement of outcomes. Glossary. Mini - presentation. CBL -Case study.	1. High-Yield Biostatistics, Epidemiology, & Public Health, 4th Edition, p.96-100 2. Gordis, Leon, Epidemiology, 5th Edition, W.B. Saunders Company, 2013, p. 54-56, p.328-335 3. Wolfgang, A. Handbook of Epidemiology. 5 vol.//Ahrens Wolfgang, Peugeot Iris. - 2 ed.- Springer Reference, 2014, v.5 4. Cancer Epidemiology: Principles and Methods. Isabel dos Santos Silva. WHO.-1999.-437 p. 5.Communicable disease control in emergencies. A field manual. Edited by M.A. Connolly.2005.-194 p.
5	Topic: Basics of Public Health Surveillance. Prevention.	Bases of Public Health Surveillance. Epidemiological surveillance. Population, sentinel and syndromic surveillance. The list of diseases. Подлежащие регистрации заболевания. Collection data. Analysis of surveillance data: time, place and patient. Interpretation of data. Mapping. Presentation of data. Prevention of communicable and non-communicable diseases. Glossary, mini presentation. CBL – Case study.	1. Epi Info. Инструмент для расследования вспышек. 2006.- 176 с. 2. Gordis, Leon, Epidemiology, 5th Edition, W.B. Saunders Company, 2013, p.55-61, p.371-376 3. Principles of Epidemiology in Public Health Practice, 3d Edition, CDC, US Department of Public Health, 2012. Lesson 5. 4 Epi Info. Инструмент для расследования вспышек. 2006.- 176 с. 5. CAPABILITY 13: Public Health Surveillance and Epidemiological Investigation. Public Health Preparedness Capabilities: National Standards for State and Local Planning. – p.119-126
<b>MODULE 2.. BIOSTATISTICS</b>			
1	Topic: Introduction to Biostatistics. Data processing programs.	Basic concepts and terms. Data management in epidemiology. Calculation of statistical indicators. Graphical and tabular data presentation.	1. Fundamentals of Biostatistics.8th Edition. 7th edition. Bernard Rosner, Cengage Learning.-2016.-856 p.



		Application of Ms Excel in medical statistics. Statistical functions. Logical function "If". Analysis package. Using of computer Epi Info program for data analysis.	2. Primer of Biostatistics. Seventh Edition. Stanton A. Glantz, Ph.-2009.-297p. 3. Epi Info for windows// <a href="http://www.cdc.gov/epiinfo/pc.html">www.cdc.gov/epiinfo /pc. html</a>
2	Topic: Descriptive statistics	Descriptive statistics. Data types (quantitative, qualitative variables). Measurement scales of variables. Average values. The concept of variability in statistical analysis. The nature of the distribution is variant. Normal distribution. Data analysis and processing software. Glossary. Mini-presentation. CBL - Case study.	1. Fundamentals of Biostatistics.8th Edition. 7th edition. Bernard Rosner, Cengage Learning.-2016.-856 p. 2. Primer of Biostatistics. Seventh Edition. Stanton A. Glantz, Ph.-2009.-297p.
3	Topic: Analytical statistics.	Methods of analysis of qualified data: test Fisher, Chi square test, z-test. The concept of reliability. Statistical probability. Methods of statistical analysis of quantitative characteristics (two groups): Student test, Mann-Whitney test, Wilcoxon signed-rank test. Univariate analysis of variance. Glossary. Mini presentation. CBL - Case study.	1. Fundamentals of Biostatistics.8th Edition. 7th edition. Bernard Rosner, Cengage Learning.-2016.-856 p. 2. Primer of Biostatistics. Seventh Edition. Stanton A. Glantz, Ph.-2009.-297p. 3. Epi Info for windows// <a href="http://www.cdc.gov/epiinfo/pc.html">www.cdc.gov/epiinfo /pc. html</a>
4	Topic: Inferential statistics	Testing hypotheses . Null and alternative hypotheses. P value. Type I and II error. Statistical power. Paired T test. Statistical studies the relationship between variables. One and multifactorial analysis. Correlation analysis: Pearson's and Spearman correlation coefficients. Linear regression analysis. Mini presentation. CBL - Case study.	1. Fundamentals of Biostatistics.8th Edition. 7th edition. Bernard Rosner, Cengage Learning.-2016.-856 p. 2. Primer of Biostatistics. Seventh Edition. Stanton A. Glantz, Ph.-2009.-297p.
5	Topic: Biostatistics in Evidence-based medicine	Statistical rates in bio-medical researches. Glossary. Mini presentation. CBL - Case study.	1. Fundamentals of Biostatistics.8th Edition. 7th edition. Bernard Rosner, Cengage Learning.-2016.-856 p. 2. Primer of Biostatistics. Seventh Edition. Stanton A. Glantz, Ph.-2009.-297p. 3.
<b>MODULE 3 EVIDENCE-BASED MEDICINE</b>			

1	Topic: Introduction to Evidence-based Medicine.	Principles and basics of Evidence-based Medicine. History, global experience and importance of evidence-based medicine for clinical practice. Five steps of evidence-based medicine. First step: asking and formulating answerable clinical questions or a problem by using the PICOT principle. Structure and types of question. Foreground and background questions. Glossary. Mini presentation. CBL - Case study.	1. Evidence-Based Answers to Clinical Questions for Busy Clinicians Work book.- 2009.-26p. 2. Essentials of Evidence-based Clinical Practice. Second Edition. -2008.-349 p.
2	Topic: Search and critical appraisal of medical scientific papers.	Second and third steps of EBM. Basic search principles. Search and critical appraisal of scientific papers. Generate appropriate keywords. Choose a bibliographic database: the Cochrane Library databases, MEDLINE, EMBASE, and CINAHL and others. Glossary. Mini - presentation. CBL - Case study.	1. How to read a paper. T. Greenhalgh. -2003.-240 p. 2. Evidence-Based Answers to Clinical Questions for Busy Clinicians Work book. - 2009.-26p.
3	Topic: Clinical Epidemiology.	Design of epidemiological research. Descriptive, analytical and experimental research. RCT and non-RCT. Hierarchy of research on evidence. Level of evidence. Epidemiological methods and principles of EBM for solve diagnostic, etiologic, prognostic and therapeutic issues of clinical medicine. Level of evidence. Glossary. Mini presentation. CBL - Case study.	1. Evidence-Based Medicine. How to Practice and Teach EBM (3rd Edition).S.E. Straus, W.S. Richardson, Paul Glasziou, R. Brian Haynes. 2. Kaplan USMLE, Lecture Notes, Behavioral Sciences and Social Science, 2017, p.11-14, 17-24
4	Topic. Systematic review and meta-analysis. AGREE system and assessment of recommendations.	Studies summarizing other studies. Systematic review and meta-analysis. Stages of creating and conducting of systematic review. Presentation of variants of meta-analysis in systematic review. Strategy of search of systematic review. Assessment of systematic review with using AGREE program. Classes of recommendations: I, II, II-a, II-b, III. Glossary. Mini presentation. CBL- Case study.	1. Literature Reviews in Social Work. Robin Kiteley and Christine Stogdon.- 2014.-20 p. 2. APPRAISAL OF GUIDELINES FOR RESEARCH & EVALUATION II. The AGREE Next Steps Consortium.-May 2009.-52 p.
5	Topic: Bioethics and clinical researches.	Four and fifth steps of EBM. Basic ethical principles of bio-medical research. Ethical aspects of non-clinical and clinical research. Glossary. Mini presentation. CBL - Case study.	1. Essentials of Evidence-based Clinical Practice. Second Edition. -2008.-349 p. 2. Kaplan USMLE, Lecture Notes, Behavioral Sciences and Social Science, 2017.-chapter 14.

**Grading of seminar on the course Patient and society**

	№	Criteria	10	8	6	4	2
			<i>Perfect</i>	<i>Good</i>	<i>Acceptable</i>	<i>It requires correction</i>	<i>Not accepted</i>
Criteria	1	Understanding topic of classes.	Full understanding of the topic and complete answers to questions by student. Student knows how using critical thinking for reasoning. Full achievement all objectives of class. Good communication with classmates and a teacher.	No full understanding of the topic with inaccuracy in answers. Standard reasoning and thoughts. Full achievement all objectives of class. Good communication with classmates and a teacher.	No full understanding of the topic with inaccuracy in answers. Standard reasoning with erroneous judgments. Adoption of information with light inaccuracies in the answers. Misunderstanding with classmates and a teacher are possible.	No full understanding of the topic, serious inaccuracy in answers. Understanding of mistakes and willingness to correct them by student. Misunderstanding with classmates and a teacher are possible for student.	Lack of understanding of the topic of class, absent of willingness to correct erroneous judgments. Lack of understanding with classmates and a teacher.
	2	Full answers to questions and test tasks.					
	3	Reasoning with critical thinking.					
	4.	Achieving the goal of class.					
	5	Good communication with classmates and with the teacher during TBL					
	6.	Understanding of their erroneous judgments and willingness to correct.					

**Grading of student's independent work over teacher's advising (maximum 50 scores)**

N	Criteria	10	8	6	4	2
1.	Completeness and accuracy	Full completion of a task. Apply critical thinking and analytical skills in completing an assignment. Effective presentation of	Completing the assignment with some inaccuracies. Standard thinking and reasoning, and application of analytical skills. Good presentation	Completing the assignment with serious inaccuracies. Understanding of mistakes and ready to fix them. Poor analytical skills. Adequate	Completing assignment with serious inaccuracies. Poor scientific thinking, practical and analytical skills, and presentation of the assignment.	Failure to complete the assignment. Does not show scientific thinking, practical analytical skills. Absent or poor presentation.
2.	Critical thinking					
3.	Analytical skills					
4	Task presentation					

**Grading of Student's independent work (SIW) (maximum 90 scores) + bonus for using English language**

N	Criteria	<i>Perfect</i>	<i>Good</i>	<i>Acceptable</i>	<i>It requires correction</i>	<i>Not accepted</i>
		<b>100</b>	<b>75</b>	<b>50</b>	<b>25</b>	<b>0</b>
<b>1</b>	The urgency of issues	<b>10</b>	<b>8</b>	<b>5</b>	<b>3</b>	<b>1</b>
<b>2</b>	Informativeness	<b>10</b>	<b>8</b>	<b>5</b>	<b>3</b>	<b>1</b>
<b>3</b>	Credibility	<b>10</b>	<b>8</b>	<b>5</b>	<b>3</b>	<b>1</b>
<b>4</b>	Consistency and consistency	<b>10</b>	<b>8</b>	<b>5</b>	<b>3</b>	<b>0</b>
<b>5</b>	Literature analysis	<b>10</b>	<b>8</b>	<b>5</b>	<b>3</b>	<b>0</b>
<b>6</b>	Practical significance	<b>10</b>	<b>7</b>	<b>5</b>	<b>2</b>	<b>0</b>
<b>8</b>	Applicability in future practice	<b>10</b>	<b>7</b>	<b>5</b>	<b>2</b>	<b>0</b>
<b>9</b>	Presentation	<b>10</b>	<b>7</b>	<b>5</b>	<b>2</b>	<b>1</b>
<b>10</b>	Check of Plagiarism	<b>10</b>	<b>7</b>	<b>5</b>	<b>2</b>	<b>0</b>
<b>bonus</b>	* - for Kazakh/Russian groups – completion of task by using English language; for groups are studying in English – in Kazakh/Russian languages					

**Map of educational and methodological capacity of the course “Patient and society”**

№	Websites	Number of students studying the discipline (estimated number)	Number of materials in the library of Al-Farabi KNU		
			kaz	rus	eng
	<b>Course books (title, year, authors) electronic variant</b>				
<b>I.</b>	<b>Module Epidemiology</b>				
1	In Kazakh Language				
1.1	Basic references: 1.Покровский, В. И. Жалпы эпидемиология дәлелді медицина негіздерімен : практика-лық сабақтарға нұсқаулық / редакциясын басқарғандар В. И. Покровский, Н. И. Брико ; қазақ тіліне аударған және жауапты редакторы Н. Жайықбаев ; жалпы редакциясын басқарған С. Ә. Әміреев - Москва : ГЭОТАР-Медиа, 2015. - 448 с. - ISBN 978-5-9704-3384-3. - Текст : электронный // URL : <a href="http://www.studmedlib.ru/book/ISBN9785970433843.html">http://www.studmedlib.ru/book/ISBN9785970433843.html</a>				
1.2	Additional references: 2.. Әміреев С. Ә., Темірбеков Ж. Т. Эпидемиология. Жалпы эпидемиология. 1-т. - Алматы: ЖАК-тың баспа орталығы, 2000. 552 б. <a href="https://drive.google.com/file/d/10IIIlnlqFXhNFxJdvKl6rQvnbLFbmfyrA/view?usp=sharing">https://drive.google.com/file/d/10IIIlnlqFXhNFxJdvKl6rQvnbLFbmfyrA/view?usp=sharing</a> 3.С.А. Әміреев, Қ.Құдайбергенұлы, Н. Жайықпаев, А.Жаханов. Жұқпалы ауруларға қатысты терминдерінің түсіндірме сөздігі.- Алматы.-2010.-288 б.				
2	In Russian Language				
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