Al-Farabi Kazakh National University Faculty Medicine and Healthcare Chair on Epidemiology, biostatistics and evidencebased-medicine

PROGRAM OF THE FINAL EXAM ON COURSE

PATIENT AND SOCIETY
EDUCATION PROGRAMME
6B10103 GENERAL MEDICINE

6 credits

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TMC OF COURSE IS CONFIRMED

On Academic Council of Medicine and Public Care Faculty Protocol N 2024.

Department

from « »___ . 2024, Protocol N

Recommended by the faculty methodical bureau

« », 2024, Protocol N

PROGRAM OF THE FINAL EXAM ON COURSE "PATIENT AND SOCIETY"

Six credits

The purpose of the program is to evaluate the knowledge, skills, and abilities acquired by the 3rd year student in the course of studying the discipline.

The exam consists of two stages.

The first stage is a written creative task. The goal is to check students' levels of theoretical training, mastery of skills, readiness for professional activity, and development of professional thinking.

The second stage is the oral presentation of the research results. It assesses practical skills for understanding the epidemiology of diseases and the application of epidemiological and statistical methods with high-quality results for solving public health issues. The purpose of this stage is to demonstrate the application of knowledge, skills, and abilities in accordance with the qualification requirements.

The final grade includes:

Testing - 50% (100 holdings, comprehension, and application tests).

Skills: PBL on issues of epidemiology, biostatistics, and evidence-based medicine.

This is a combined exam N1. Thematic content covers all types of work: topics of lectures and seminars, as well as assignments for students' independent work. The exam consists of 2 stages in the MOODLE LMS.

Learning 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 trialsfor 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 the context of a formation of pathology in a particular patient
- 5. Apply different approaches to understanding the social, economic, and political forces that affect the burden of disease and the health system's ability 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 are based on the ethical principles as a base ofclinical 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.
- 9. Demonstrate adherence to the highest standards of professional responsibility and integrity; comply with ethical principles in all professional interactions;
- 10. Demonstrate need for continuous professional training and improvement of their knowledge and skills;
- 11. Demonstrate skills in conducting scientific research, desire for new knowledge and transfer it to others:
- 12. Apply knowledge and skills of population's health surveillance, including epidemiological surveillance over infectious diseases;
- 13. Apply modern statistical analysis methods in medical and biomedical research and independently use computer statistical programs.

List of examination items for a preparation to exam Module I. Epidemiology

Topic: Introduction and bases of epidemiology.

Topic: Epidemiological methods and study design.

Topic: Exposure-oriented Epidemiology. Topic: Outcome-oriented Epidemiology.

Topic: Base of epidemiological surveillance. Prophylaxis of diseases.

Module II. Biostatistics

Topic: Introduction to Biostatistics. Data processing programs.

Topic: Descriptive statistics. Statistics.

Topic: Analytical statistics. Topic: Inferential statistics.

Topic: Statistics in Evidence-Based Medicine.

Module III. Evidence-based Medicine

Topic: Principles and methods of Evidence-Based Medicine.

Topic: Search and critical appraising of medical scientific articles.

Topic: Clinical Epidemiology.

Topic: Systematic review and meta-analysis. AGREE and assessment of clinical recommendations.

Topic: Bioethics and clinical trials.

EXAM RULES

At the time set by the teacher, students are authorized in the Moodle LMS and get access to the task "Final exam in the discipline" Combined No. 3: 2-stage: Testing (30 questions) at the first stage and case studies at the second stage during 2 days in the Moodle LMS.

First stage: The written part of the project is completed by the deadline set by the teacher in Moodle.

1. The deadline is 24 hours before the oral part of the exam. Students must upload your writing task to LMS MOODLE.

Second stage: The oral presentation of research results and answer to examiner questions in time of the exam schedule.

The form of the final control (exam): WRITTEN - STUDY CASE

The form holding the final control (exam) *.	Use weary platform m	For whom recommend ed	Availability proctoring, video recordings, check for plagiarism	Opportunit y automatic generating tickets / questions	carried out check
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Stage 1. Written group task

Example of student report content:

- 1. Introductory part
- list of the group, highlighting the name of the author of the particular uploaded document;
- a brief description of the task—exactly the task assigned. It is not necessary to copy the whole teacher's document.
- 2. main part:
- description of the achieved results (directly solving the task in the form of a report, images, links to videos, diagrams, charts, graphs, etc., depending on the assignment);
- description of the progress of the case study;
- description of deviations and difficulties encountered in the course of the assignment, as well as the ways used to overcome them.
- 1. Teamwork (in case of group work):
- group participants:

describe their personal contribution to the fulfillment of the project tasks;

each student discloses the results he/she has achieved and their significance for the fulfillment of the project;

- the group captain (responsible for the video recording)
- describes his/her own contribution to the fulfillment of the project.

In addition, the captain's report indicates the work done by each group member (from the reports of other group members).

The description of each student's work is presented in the report in separate chapters or by hyperlinks to the blocks in the text that describe the work done by a particular participant.

The captain should begin describing a particular student's work with the student's surname, first name, and patronymic.

If necessary, the captain shall leave comments on the student's work.

- 2. Conclusion. Conclusions on the work done.
- 3. Literature.
- list of used literature:

description of methods and technologies used in the project to solve the tasks (programs, tools, references to key regulatory documents,

Stage 2 Each team presents its results offline.

- **a.** The team captain introduces the team and informs each student's role in the team research.
- c. Every team member makes a defense of his/her work from the team research.

- 2. The instructor asks the student additional questions about the essence of his/her work.
- 3. After the student's response is complete, the instructor invites the next student to respond.

Maximum scores for the test are 50 points

Final assessment of the two stages of the exam:

Letters assessme nt	Numerical assessment	Scores (%)	Traditional assessment	Requirements		
A	4,0	95-100	Excellent	Full understanding of course topics.		
A-	3,67	90-94		Using cognitive, systemic and functional competencies. Critical thinking, analysis, application of knowledge and skills.		
B+	3,33	85-89	Good	Understanding of course topics with few		
В	3,0	80-84		inaccuracies. Using cognitive, systemic,		
B-	2,67	75-79		and functional competencies, as well as		
C+	2,33	70-74		standard critical thinking, analysis, and application f knowledge and skills.		
С	2,0	65-69	Satisfied	Incomplete understanding of course		
C-	1,67	60-64		topics. Students do not use cognitive,		
D+	1,33	55-59		systemic, and functional competencies to		
D-	1,0	50-54		the full extent. Standard critical thinking, poor analysis, and incomplete application f knowledge and skills.		
FX	0,5	25-49	Unsatisfied	Lack of understanding of course topics. The student does not use cognitive, systemic, and functional competencies. There is no critical thinking, and there is poor analysisand application of knowledge and skills.		

References:

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- 2. High-Yield Biostatistics, Epidemiology, & Public Health, 4th Edition.-297p. https://drive.google.com/file/d/1Qh1B6vdUkd-OA7dS1jJCiG1ZeQXxvBKr/view?usp=sharing
- 3. Kaplan USMLE, Lecture Notes, Behavioral Sciences and Social Science, 2017.-229p. https://drive.google.com/file/d/1t2HByO_ybBomAH_Z8HhmP3rSJxewwKBC/view?usp=sharing
- 4. Wolfgang, A. Handbook of Epidemiology. 5 vol.//Ahrens Wolfgang, Peugeot Iris. 2 ed.- Springer Reference, 2014.
- 5. Fundamentals of Biostatistics.8th Edition. 7th edition. Bernard Rosner, Cangage Learning.-2016.-856 p.https://drive.google.com/file/d/1EqPlTfyovqpb930pfCYt-zIKYYPE5-TG/view?usp=sharing
- 6. Primer of Biostatistics. Seventh Edition. Stanton A. Glantz, Ph.-2009.-297p.

- 7. Epi Info for windows// www.cdc.gov/epiinfo/pc. html
- 8. Evidence-Based Medicine. How to Practice and Teach EBM (3rd Edition).S.E. Straus, W.S. Richardson, Paul Glasziou, R. Brian Haynes.
- 9. Literature Reviews in Social Work. Robin Kiteley and Christine Stogdon.- 2014.-20 p. https://drive.google.com/file/d/1Ybiea7gwaJD25RzlcNvH-m8j0wk27Cmd/view?usp=sharing 10. Evidence-Based Answers to Clinical Questions for Busy Clinicians Work book.- 2009.-

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- https://drive.google.com/file/d/1F8UIXlusu6FjRejtotQG6VisGUBDL9Br/view?usp=sharing 11. APPRAISAL OF GUIDELINES FOR RESEARCH & EVALUATION II. The AGREE Next Steps Consortium.-May 2009.-52 p.
- 12. Essentials of Evidence-based Clinical Practice. Second Edition.-2008.-349 p. https://drive.google.com/file/d/1FykOXyFhsSp4UQROJQvwsknHvrKxFgMQ/view?usp=sharing