AL-FARABI KAZAKH NATIONAL UNIVERSITY
Faculty of Philology
Department of Foreign Languages

PROGRAM OF FINAL EXAMINATION IN THE DISCIPLINE

Code: IYa(p)5202, ID 12512
Discipline:
"Foreign Language (professional)
Magistracy"

Educational programme

7M06104 Computer Science
7M06301 - Information Security Systems

Course – 1
Semester – 2
Number of credits – 5

Almaty, 2026

1. THE THEMATIC PROGRAM OF THE DISCIPLINE

The aim of the discipline is to form practical skills in various types of speech activity in a foreign language. The training course builds the ability to perceive, understand and translate information in the modern global space, participate in scientific events to test their own research. The discipline is aimed at improving competencies in accordance with international standards of foreign language education

Learning outcomes in the discipline: As a result of studying the discipline, the student will be able to:
1. **Listening comprehension**: to understand authentic speech of a general, professional and scientific nature
2. **Reading:** reads and translates authentic texts on the specialty in a foreign language, as well as extract the information from the reading of a scientific text.
3. **Speaking:** applies professional vocabulary and terminology necessary for effective communication in a professional environment within the framework of your specialty.
4. **Writing:** to compose written texts of an informative nature (message, report, review, scientific and technical documentation); to annotate texts on the profile of the specialty and on research topics;
5. Prepares presentations and project work in a foreign language.

Main topics studied in the discipline.

Module 1. Introduction to the Subject

1.Information Security as a Multidisciplinary Field
2. Threats and Vulnerabilities in Modern Information Systems
3. Cryptography as a Foundation of Information Security
4. Information Security Management and Risk Assessment
5. Human Factor in Information Security
1.Algorithms & Data Structures
2. Machine Learning / AI
3. Computer Systems / Architecture
4. Networking & Security
5. Databases & Big Data

Module 2. Stages of the subject

1.Network Security and Traffic Protection
2 . Malware Types and Defense Strategies
3. Authentication and Access Control Mechanisms
4. Data Protection and Privacy
5. Incident Response and Security Monitoring
1. Algorithms and Data Structures – Graph Traversal
2. Machine Learning – Introduction to Supervised Learning
3. Computer Systems – Multithreading
4. Networking – TCP vs UDP
5. Databases – NoSQL vs SQL

Module 3. Definition of the subject

1. Conceptual Foundations of Information Security
2. Advanced Threat Landscape and Attack Methodologies
3. Cryptographic Mechanisms and Trust Models
4. Risk-Oriented Security Governance and Compliance
5. Human-Centric Security and Cognitive Exploitation
1. Advanced Algorithms – Dynamic Programming
2. Machine Learning – Convolutional Neural Networks
3. Computer Systems – Virtualization and Containerization
4. Networking – Software-Defined Networking (SDN
5. Databases – Distributed Transactions and CAP Theorem

List of recommended sources.

Main literature:

1.Rongmao Chen, Robert H. Deng, Moti Yung (ред.) — *Information Security and Cryptology: 21st International Conference, Inscrypt 2025.*
2 Dusko Pavlovic & Peter-Michael Seidel — *Security Science (SecSci). Basic Concepts and Mathematical Foundations* (2025)
3. Stuart J. Russell & Peter Norvig — *Artificial Intelligence: A Modern Approach* (4-е изд., 2020)

outledge (разные авторы) — *Computer Science Textbook Series (выпуски 2025)*
Tiffany Timbers, Trevor Campbell, Melissa Lee — *Data Science: A First Introduction* (2024)
3. Artificial Intelligence: A Textbook — *Charu C. Aggarwal 2021.*

Additional literature:

1.Jack Dougherty & Ilya Ilyankou — *Hands-On Data Visualization* (2021)
2. Empire of AI: Dreams and Nightmares in Sam Altman's OpenAI — *Karen Hao 2025.*
3. Introduction to AI Safety, Ethics, and Society — *Dan Hendrycks 2024.*

Online resources:

1.www.softwaresuggest.com What is Educational Management:Types,Importance and Benefits.
2. eprints.um.edu.myTheories of Educational Management and leadership.
3. MOOC: Academic Writing: The Structure of a Research Paper. On the platform open.kaznu.kz.
4. https://www.ebooks.com › en-us
5. http://dictionary.cambridge.org

2. METHODOLOGICAL INSTRUCTION FOR FINAL EXAMINATION: STANDARD WRITTEN EXAMINATION (OFFLINE)

2.1. Exam format: Standard written examination (offline). **Platform:** IS Univer.

2.2. The purpose of the written exam is to demonstrate the learning outcomes, skills and competencies acquired during the study of the discipline, the ability to logically express one's thoughts in writing, and argue one's point of view.

2.3. Expected results of the exam tasks:

One written exam card contains 3 questions that identify learning outcomes for the course studied and are assessed according to the criteria described below:

Question 1 - Criterion 1. Knowledge of the theory and concept of the course; logic of presentation. Criterion 2. Understanding and confirmation with examples of the theoretical principles presented in the course content.

Question 2 - Criterion 3. Application of the selected methodology and technology to written practical tasks. Criterion 4. Disclosure and solution of the main problem given in the practical task.

Question 3 - Criterion 5. Evaluation and written critical analysis of the applicability of the chosen methodology to the proposed practical task. Criterion 6. Justification of the result obtained from one's own practice.

2.4. The examination procedure.

2.4.1. The standard written offline exam is conducted in accordance with the approved schedule.

2.4.2. 15 minutes before the start of the offline written exam, the teacher on duty checks the students' identities using their ID cards, and seats the students in the seats indicated on the attendance sheets.

2.4.3. In the event that a substitute person appears at the offline written exam, the teacher on duty draws up a corresponding report of violation of these Rules.

2.4.4. Late students will not be allowed to take the exam.

2.4.5. During the exam, the teacher on duty monitors students' compliance with the rules of conduct in accordance with the approved instructions.

2.4.6. At the end of the time allotted for the exam (2 astronomical hours), the teacher on duty:

1) collects examination papers;

2) puts in each work a sign of the end of writing the work in the answer sheets - the letter X;

3) provides answer sheets along with attendance sheets for encryption to a specialist from the dean's office.

2.4.7. In case of delay in providing work for encryption to a specialist from the dean's office, a corresponding act is drawn up with subsequent prosecution of the perpetrators.

2.4.8. During the exam, students are prohibited from carrying and/or using cheat sheets, cell phones, smart watches and other technical and other means that can be used for unauthorized access to auxiliary information. It is prohibited to talk with other students and strangers, or to write down your full name and/or other identifying information in your answers.

2.4.9. If a student appears for the exam and refuses to answer the ticket, passing the exam will be graded as an "F."

2.4.10. If there is no good reason, failure to appear for the exam will be assessed as an "F".

2.4.11. If a student violates one or more of these points, an Act of cancellation of the examination work (hereinafter referred to as the Act) is filled out, and a grade of "F" ("unsatisfactory") is assigned for the discipline.

2.4.12. For repeated violation of these Rules during the exam, the student is presented for consideration by the Faculty Council on Ethics.

2.4.13. The final grade for the discipline can be canceled within 1 month after the exam, if a student is found to have violated the instructions for conducting final control using distance learning technologies and/or rules of behavior during the exam: using cheat sheets, cell phones, negotiating, etc. based on recordings from surveillance cameras with filling out the Report. The act cannot be annulled or appealed.

2.4.14. All violations during exams are recorded in the student's transcript.

3. EVALUATION POLICY.

RUBRICTOR FOR CRITERIAL ASSESSMENT OF FINAL EXAMINATION

Discipline: Foreign Language (professional). **Form:** Standard written examination (offline). **Platform:** IS Univer

№	Score / Criterion	DESCRIPTORS				
		«Excellent»	«Good»	«Satisfactory»	«Unsatisfactory»	
		90-100 %	70-89 %	50-69 %	25-49%	0-24 %
Question 1	*Criterion 1.* Knowledge of the theory and concept of the course; logic of presentation.	An "excellent" grade is given for an answer that contains an exhaustive explanation of the question, a detailed argumentation for each conclusion and statement, is constructed logically and consistently, and is supported by examples from the developed classroom topics.	A "good" grade is given for an answer that contains a complete but not exhaustive coverage of the issue, an abbreviated argumentation of the main points, and allows for a violation of the logic and sequence of presentation of the material. The answer contains stylistic errors and inaccurate use of terms.	A "satisfactory" grade is given for an answer that contains incomplete coverage of the questions proposed in the ticket, superficially argues the main points, and allows compositional imbalances in the presentation, violations of the logic and sequence of presentation of the material.	An "unsatisfactory" grade is given for incorrect coverage of the questions posed, erroneous argumentation, factual and verbal errors, and for the assumption of an incorrect conclusion.	An "unsatisfactory" grade is also given for ignorance of basic concepts and theories; for violation of the Rules for final control.
	Criterion 2. Understanding and confirmation with examples of the theoretical principles presented in the course content.	A comprehensive answer with illustrated examples was given to the question; the answer is presented in literate scientific language, all terms and concepts are used correctly and explained correctly.	The answer is not fully supported by specific examples. There are some inaccuracies.	The student does not illustrate theoretical concepts with examples from the developed class notes.	Key concepts for the training course contained in questions are interpreted with significant errors.	The student does not provide examples to support the main theoretical principles of the course.
Question 2	*Criterion 3.* Application of the selected methodology and technology to written practical tasks. Criterion 4. Disclosure and solution of the main problem given in the practical task.	Excellent completion of the training assignment, a detailed, reasoned written answer to the question posed, followed by solving practical problems of the course.	Partial completion of the educational assignment, incomplete, sometimes reasoned answer to the question posed with an incomplete solution to the practical problems of the course; illiterate use of scientific language norms in the course.	The material is presented in fragments, in violation of logical sequence, factual and semantic inaccuracies are made, and theoretical knowledge of the course is used superficially.	An irrational method of solving a task or an insufficiently thought-out answer plan; inability to solve problems, perform tasks in general; making mistakes and omissions that exceeds the norm.	Inability to apply knowledge and algorithms to solve tasks; inability to draw conclusions and generalizations. Violation of the Rules for final control.
	Criterion 4. Disclosure and solution of the main problem given in the practical task.	Scientific concepts are freely applied to the task at hand, followed by a logical and evidence-based disclosure of the main problem.	The student's knowledge is adapted; the answers are weak structured, the answer contains minor factual errors, which he can correct independently, thanks to a leading question.	There is no meaningfulness of the material provided, there is no understanding of interdisciplinary connections.	The student finds it difficult to answer most of the additional questions on the content of the exam or does not give the correct answers.	The student did not fully understand the material. Violation of the Rules for final control.
Question 3	*Criterion 5.* Evaluation and written critical analysis of the applicability of the chosen methodology to	Consistent, logical and correct justification of scientific principles and the applied methodology and	3-4 inaccuracies in the use of conceptual material, minor errors in generalizations and conclusions are allowed, which	There are conclusions on the applicability of substantiated scientific provisions are vague and unconvincing; there are	The task was completed with gross mistakes, the answers to the questions were incomplete, the conceptual	The task has not been completed, there are no answers to the questions posed, materials and analysis

	the proposed practical task.	technology, literacy, compliance with the norms of scientific language, 1-2 inaccuracies in the presentation of the material are allowed, which do not affect the generally correct conclusions.	do not affect the good overall level of task completion.	stylistic and grammatical errors, as well as inaccuracies in processing the results of a practical decision.	material and argumentation were poorly used.	tools have not been used.
	Criterion 6. Justification of the result obtained from one's own practice.	The answer is illustrated with examples and visuals. materials, including from the student's own practice.	Analysis of 3-4 provisions of existing theories, scientific schools and directions with justification of the result obtained from one's own practice on the issue of the exam card with some inaccuracies.	Poor application of the main volume of material in accordance with the training program with difficulties in independently reproducing it in writing.	Demonstration of difficulty in providing written answers to problematic questions.	Lack of ability to apply course methods when giving examples. Violation of the Rules for final control.

Formula for calculating the final grade:
Final grade **(FG) = (%1+%2+%3+%4+%5+%6) / K**, where % is the level of task completion by criterion, K is the total number of criteria.

Example of calculating the final grade

№	Score / Criterion	«Excellent»	«Good»	«Satisfactory»	«Unsatisfactory»	
		90-100 %	70-89%	50-69%	25-49%	0-24%
1.	Criterion 1	100				
2.	Criterion 2		75			
3.	Criterion 3			60		
4.	Criterion 4				45	
5.	Criterion 5	100				
6.	Criterion 6				49	
	Final %	**200**	**75**	**60**	**94**	200+ 75 + 60 + 94 = 429 **429 / 6 criteria = 71,5** **Final score, as % = 72**

Based on percentage obtained during the calculation, we can compare the score with the rating scale.
72 points range from 70 points to 89 points, which corresponds to the "Good" category according to the grading scale.
Thus, with this calculation, the project will be rated **72 points "Good"** in accordance with the point-rating letter system for assessing educational achievements students with their transfer to the traditional grading scale and ECTS.

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