NJC
«al-Farabi KazNU»

«APPROVED»
Member of the Board -
Vice-Rector for academic affairs
Kazmagambetov A.G. _____
« 13 » November 2024

Program of refresher course
«Digital Mastery of the Teacher: Tools and Techniques in Modern Education»

Almaty 2024

CONTENT

1. GENERAL

1. This educational program of advanced training courses (hereinafter referred to as the Program) was developed and implemented in accordance with the Order of the Minister of Education and Science of the Republic of Kazakhstan dated January 28, 2016 No. 95 “Rules for organizing and conducting advanced training courses for teachers, as well as post-course support for the activities of a teacher” (as amended by the order of the Minister of Education and Science of the Republic of Kazakhstan dated 04/09/2020 No. KR DSM-24/2020)*;* Order of the Minister of Education and Science of the Republic of Kazakhstan dated May 4, 2020 No. 175 “On approval of the Rules for the development, coordination and approval of educational programs for advanced training courses for teachers”; Law of the Republic of Kazakhstan dated May 21, 2013 No. 94-V “On personal data and their protection” (as amended and supplemented as of December 30, 2021).
2. This program determines the procedure for organizing and conducting refresher course for teachers and employees of educational organizations, implemented by Al-Farabi Kazakh National University (hereinafter referred to as Al-Farabi KazNU, University, Organization).
3. The program is designed to improve the qualifications of teachers (teachers) in all areas.
4. In order to ensure high-quality implementation of the program, identify the needs of the audience and conduct research, during the implementation of the program it is possible to collect personal data (digital footprint) through the use of various types of surveys, questionnaires, etc.
5. By submitting an application to participate in the program, the student confirms that he has read this program and agrees to the collection, processing and storage of personal data.
6. Applications from students to participate in the program are accepted by filling out an electronic form.
7. The organization undertakes:
   - organize refresher course for teachers (hereinafter referred to as the Course) in accordance with the curriculum;
   - in case of successful completion of the program and completion of all types of work, according to the subject of the program, issue the Listener a certificate (of its own sample) on the topic of advanced training courses, indicating the topic and volume of hours;
   - provide post-course support for teachers’ activities for one month after completing the program.
8. Participants undertake:
   - attend the Course;
   - fully master the Course curriculum;
   - complete all types of practical/independent work according to the minimum requirements.
9. The organization has the right to refuse to accept applications if the maximum limit on the number of listeners is reached.

2. GLOSSARY

1. The following terms and definitions are used in this program:

● gamification – the use of game elements, methods, technologies and mechanisms to increase engagement and interest in non-game activities;

● distance learning (distance learning) – one of the forms of training, targeted and methodically organized management of educational and cognitive activities and development of individuals located at a distance from educational organizations, through electronic and telecommunication means. Provides the opportunity for continuous learning without interruption from the main activity, in an individual mode, according to an individual program, regardless of place and time. Distance learning can be synchronous and asynchronous:

- synchronous learning (simultaneous, in real time) – requires live communication between the student and the teacher, classmates at a scheduled time online using a teleconference. The approach limits the student's ability to learn at their own pace;

- asynchronous learning (not simultaneous) - students gain access to the course content outside

the schedule, and can complete assignments on their own schedule, communicate via online chats with the teacher and classmates, adhering only to the deadlines set by the teacher for submitting assignments. The main interaction between the student and the teacher occurs through correspondence, completing assignments, testing (quiz), video comments and forums (discussions);

● campus course (SPOC, small private online course) - a variant of MOOC. A small closed online course that is used in the implementation of formal training in an organization. Focused on small academic groups. It is an implementation of the "flipped classroom" model. In this regard, the campus course is focused on specific groups of students who can take the course and are ready to interact with each other throughout the learning process;

● massive open online course (hereinafter referred to as MOOC) is a training course with massive interactive participation using e-learning technologies and open access via the Internet;

● online course is a curriculum that allows one to acquire knowledge, skills and competencies via the Internet in real time, including using previously recorded video lectures in the University, approved by the University;

● online learning is a form of training in specific areas of personnel training, in which a student receives higher and (or) postgraduate education through information and communication technologies and the Internet for interaction between a teacher and a student, regardless of spatial and temporal distance;

● pedagogical design is the development of distance learning methods and filling the course with substantive information, forming a sequence of presentation and introducing modern methods of presenting educational material;

● advanced training of teachers is a form of professional training that allows acquiring new, as well as maintaining, expanding, deepening and improving previously acquired professional knowledge, abilities, skills and competencies in order to improve the quality of teaching and learning;

● post-course support is a system of activities that ensures the development of professional competence of a teacher through continuous monitoring of his/her post-course activities and the provision of methodological and advisory assistance;

● learning outcomes are the volume of acquired knowledge, abilities, skills, as well as the formed values and attitudes that students demonstrate as a result of mastering the program, confirmed by an assessment;

● certificate is a document issued upon completion of advanced training courses on a specific topic, form, content and duration of professional training;

● listener is a person taking advanced training courses;

● digital footprint is a unique set of recorded data obtained during the course of students' actions on the Internet using digital devices;

● digital educational resources (hereinafter referred to as DER) – didactic materials that provide for the study of disciplines in an interactive form: photographs, video fragments, virtual interaction platforms, static and dynamic models, virtual reality objects and interactive modeling, sound recordings and other digital educational materials.

3. COURSE SUMMARY

1. Course title: "Digital Mastery of a Teacher: Tools and Techniques in Modern Education".
2. Venue: offline: rector's office building of Al-Farabi KazNU, room 203; online: MS Teams.
3. Participants: teachers of various levels of education (secondary, higher, postgraduate).
4. Total course time: 72 hours (with issuance of a certificate);
5. Academic hour of the course: 50 minutes.
6. Course language: Russian.
7. Format of work on the course: hybrid (synchronous / asynchronous).
8. The purpose of the course is professional development and improving the level of competence of teachers of various levels of education (secondary, higher, postgraduate) in the field of distance learning technologies, distance teaching methods, digital technologies. The course is aimed at mastering modern educational technologies and tools by students, as well as teaching them to use them to create interactive lessons, effectively communicate with students and individualize the

educational process

9. Course objectives:

- teach learners to use and create educational content, as well as interact with other participants in the educational process based on digital technologies and various formats;
- teach learners to assess the level of mastery of students at various levels (secondary, higher, postgraduate) of learning outcomes in disciplines using digital educational resources and online tools.

10. Expected learning outcomes:

• conduct classes on the main online educational platforms;

• build the educational process taking into account various formats and technologies of distance learning;

• use the capabilities of the Moodle platform to create interactive materials and test assignments;

• use systems with “artificial intelligence” to create course content;

• analyze student responses using automated systems for assessing results.

11. Class schedule: 3-7 hours per day. The Course program is completed simultaneously, over ten calendar days, through the mastery of two modules and includes various types of classes and academic work (Table 1).

Table 1. Course regulations

Topic	**Total (hours)**	**Lecture (hours)**	**Independnt work (hours)**	**MOOC (hours)**
Module 1. Synchronous part - lectures by the authors of the Course, question/answer sessions.	46	22	20	-
Module 2. Practical/independent work on the covered materials. Completing an online course.	30	-	10	20
TOTAL	72	22	30	20

4. STRUCTURE AND CONTENT OF THE PROGRAM

№	Topic	Lecture (hours)	Independnt/practical work (hours)	Total (hours)
Module 1. Synchronous part - lectures by the authors of the Course, question/answer sessions.		**21**	**27**	**48**
1 day	Introduction. Course overview.	1	-	1
	nterface overview, organization of correspondence, forums and event planning in LMS Moodle.	1	-	1
	Tools for course design: creating glossaries, files, descriptions and course books.	1	2	3
2 day	Creation and configuration of test elements - assignments, lectures.	1	2	3
	Creating and configuring test elements - testing.	3	3	6
	Creating and configuring test elements - workshops.	2	2	4
3 day	Creating interactive course elements and configuring their display in the LMS Moodle.	2	2	4
	Setting up LMS Moodle course gradebook. Restarting LMS Moodle courses.	1	1	2

	Checking students' text works for the presence of borrowings	1	2	3
4 day	Microsoft Office - Working with Cloud Services	1	2	3
	Microsoft Teams classes, teams, interface	1	3	4
	Microsoft Teams creating tasks and forms	1	2	3
5 день	Working with chatbot systems. History and creation of chatbots.	3	3	6
	Working with Miro interactive whiteboards	2	3	5
Module 2. MOOC and practical/independent work		**Lecture** (hours)	**Independnt/practical work (hours)**	**Всего** (hours)
		20	**4**	**24**
6-10 days	Completing practical/test assignments and completing the MOOC "Learn remotely" on the platform open.kaznu.kz	20	4	**24**
TOTAL HOURS:		**41**	**31**	**72**

5. ORGANIZATION OF THE EDUCATIONAL PROCESS

1. The courses are organized without interruption from work (distance learning) and are primarily aimed at teachers working at the following levels of education:
   - secondary education (general secondary education, technical and vocational education);
   - higher education;
   - postgraduate education.
2. Students who have completed the entire program of the Courses, successfully passed the testing and completed the practical work, are issued a certificate by the Organization on the topic of the advanced training courses indicating the topic and number of hours.
3. For the purpose of high-quality and successful mastering of the Course program, it is recommended to connect from a personal computer/laptop and have broadband Internet access.

6. EDUCATIONAL AND METHODOLOGICAL SUPPORT OF THE PROGRAM

1. An information and educational system that enables interaction between students and teachers regardless of their location (MS Teams online conference and webinar platform).
2. Students are provided with access to the MOOC of the Organization «Teach Remotely» for the duration of the course.
3. Educational and methodological support for all modules is provided using video lectures, seminars, tests, assignments for mutual checking and other interactive means of interaction.
4. Distance learning technologies, active and interactive forms of conducting classes are used in the implementation of the Program.
5. When organizing the educational process in order to monitor and assess the knowledge of students, the following are carried out: independent work, test assignments, interactive forms and methods of teaching: lecture, practical work, MOOC / SPOC.
6. Upon completion of the Courses, a final assessment is planned in the form of testing and recording of the completed independent (practical) work in accordance with the training program (for more details, see paragraph 7 of this program).

7. EVALUATION OF LEARNING RESULTS

1. Successful completion of the Course and assignments implies complete mastery of all sections of the Course and the development of a sufficient level of competence necessary for the application of the acquired knowledge, skills and abilities in professional activities.
2. Assessment of knowledge, skills and abilities of students is carried out according to the following indicators:
   - practical tasks (pass/fail answer);
   - completion of the MOOC "Teach Remotely" (final score for completing MOOC assignments);
   - overall activity during the course (assessed based on the number and quality of questions to the course authors, activity during oral/chat discussions, use of digital educational resources during synchronous work with course trainers).
3. The conditions for completing the course and receiving a certificate are the completion of the following types of work, with a final grade of at least 80%.

Activities		**%**
1. Overall activity and engagement		**10**
Overall activity during the course (assessed based on the number and quality of questions to the course authors, activity during oral/chat discussions, use of digital educational resources during synchronous online work with course trainers)		10
2. Practical tasks		**65**
Creation and configuration of test elements – assignments, lectures.	**Practical task:** creation and design of one lecture and one assignment on the chosen topic of the discipline. **Submission form:** uploading prepared materials to the Moodle LMS.	5
Creation and configuration of testing tools – testing.	**Practical task:** creating a test in the Moodle LMS using categories (minimum number of categories is 4, minimum number of questions is 25).	5

	Submission form: uploading prepared materials to the Moodle LMS.	
Creating and configuring test elements – workshops.	**Practical task:** creating a seminar on a chosen topic, assigning grades to students before the end of the Course **Submission form:** uploading prepared materials to the Moodle LMS.	10
Creating interactive course elements and customizing their display in the LMS Moodle.	**Practical task:** creation of interactive testing materials for the course (minimum number of different types of h5p elements – 2). **Submission form:** uploading prepared materials to the Moodle LMS.	5
Microsoft Office – working with cloud services	**Practical task:** creating a course file structure in OneDrive **Submission form:** link to the course folder in OneDrive	5
Microsoft Teams classes, teams, interface	**Practical task:** creating a class and adding members **Submission form:** link to the course folder in Microsoft Office	5
Microsoft Teams creating tasks and forms	**Practical task** Adding Microsoft Office to the Classroom **Submission form:** Link to course folder in Microsoft Teams	10
Working with chatbot systems. History and creation of chatbots.	**Practical task:** development of a discipline syllabus using chatbots. **Submission form:** links to created documents.	10
Creating content on the Miro interactive whiteboard.	**Practical task:** development and uploading of a course presentation for the student in the Miro demo version. **Submission form:** link to the Miro interactive whiteboard.	10
3. Taking MOOC		**25**
Completing practical/test assignments and completing the MOOC “Learn remotely” on the open.kaznu.kz platform	Passing the final testing of the MOOC “Teach Remotely”	25
	Maximum score for the course:	**100**

8. POST-COURSE SUPPORT

1. For the high-quality practical implementation of the acquired knowledge and analysis of changes in the professional activity of the teacher, including in the distance mode, the Organization implementing this Program, within 1 (one) month, after the completion of the program, provides post-course support for the activities of teachers, in various formats (in person / remotely) according to the work schedule (Appendix 1).

2. Post-course support for students in person is carried out according to the work schedule, on the basis of the Organization at the request of students (Appendix 1).

3. Additionally, the Organization may involve teachers who have completed advanced training courses and successfully apply the acquired knowledge, skills, and abilities in practice, to participate in events to exchange experiences, publicly recognize their experience (publications in the media) and other types of activities related to the dissemination of experience.

9. LIST OF BASIC AND ADDITIONAL REFERENCES

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Appendix 1

SCHEDULE OF POST-COURSE SUPPORT CONSULTATIONS

Время / День	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
9:00 - 10:00	Speaker's name	Speaker's name	Speaker's name	Speaker's name	Speaker's name
10:00 - 11:00	Speaker's name	Speaker's name	Speaker's name	Speaker's name	Speaker's name
11:00 - 12:00	Speaker's name	Speaker's name	Speaker's name	Speaker's name	Speaker's name
12:00 - 13:00	Speaker's name	Speaker's name	Speaker's name	Speaker's name	Speaker's name
14:00 - 15:00	Speaker's name	Speaker's name	Speaker's name	Speaker's name	Speaker's name
15:00 - 16:00	Speaker's name	Speaker's name	Speaker's name	Speaker's name	Speaker's name
16:00 - 17:00	Speaker's name	Speaker's name	Speaker's name	Speaker's name	Speaker's name
17:00 - 18:00	Speaker's name	Speaker's name	Speaker's name	Speaker's name	Speaker's name

* Consultation can be obtained online, by sharing the screen using one of the programs (Zoom, AnyDesk, TeamViewer).

** To clarify the possibility of receiving a face-to-face consultation, please contact an employee in advance via the Whatsapp messenger / Call.

Contacts:

Republic of Kazakhstan, Almaty, 050040 al-Farabi Ave. 71, Al-Farabi Kazakh National University (Main building) – Office of Academic and Digital Innovation (2nd floor), room No. 201 / 207.